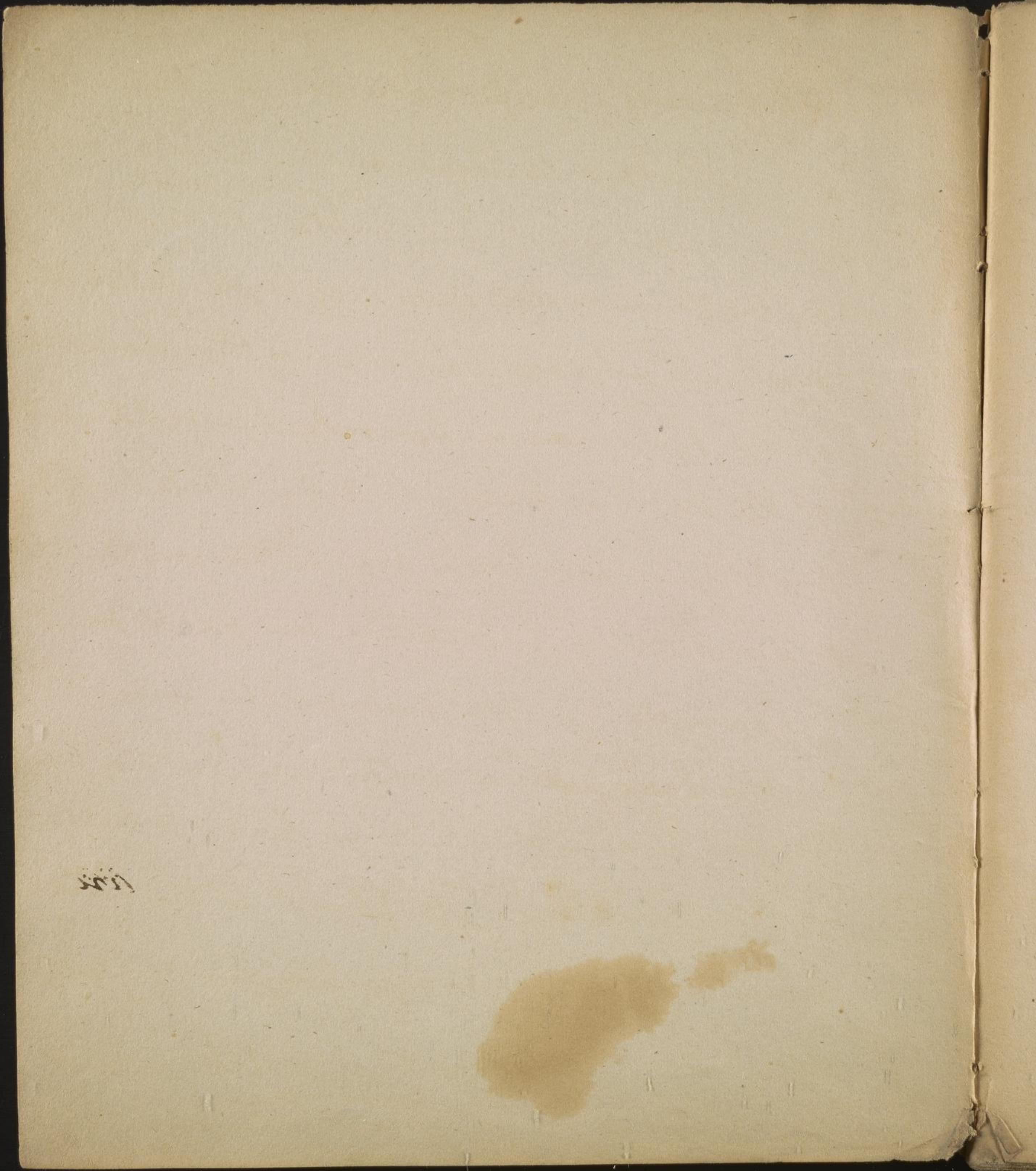


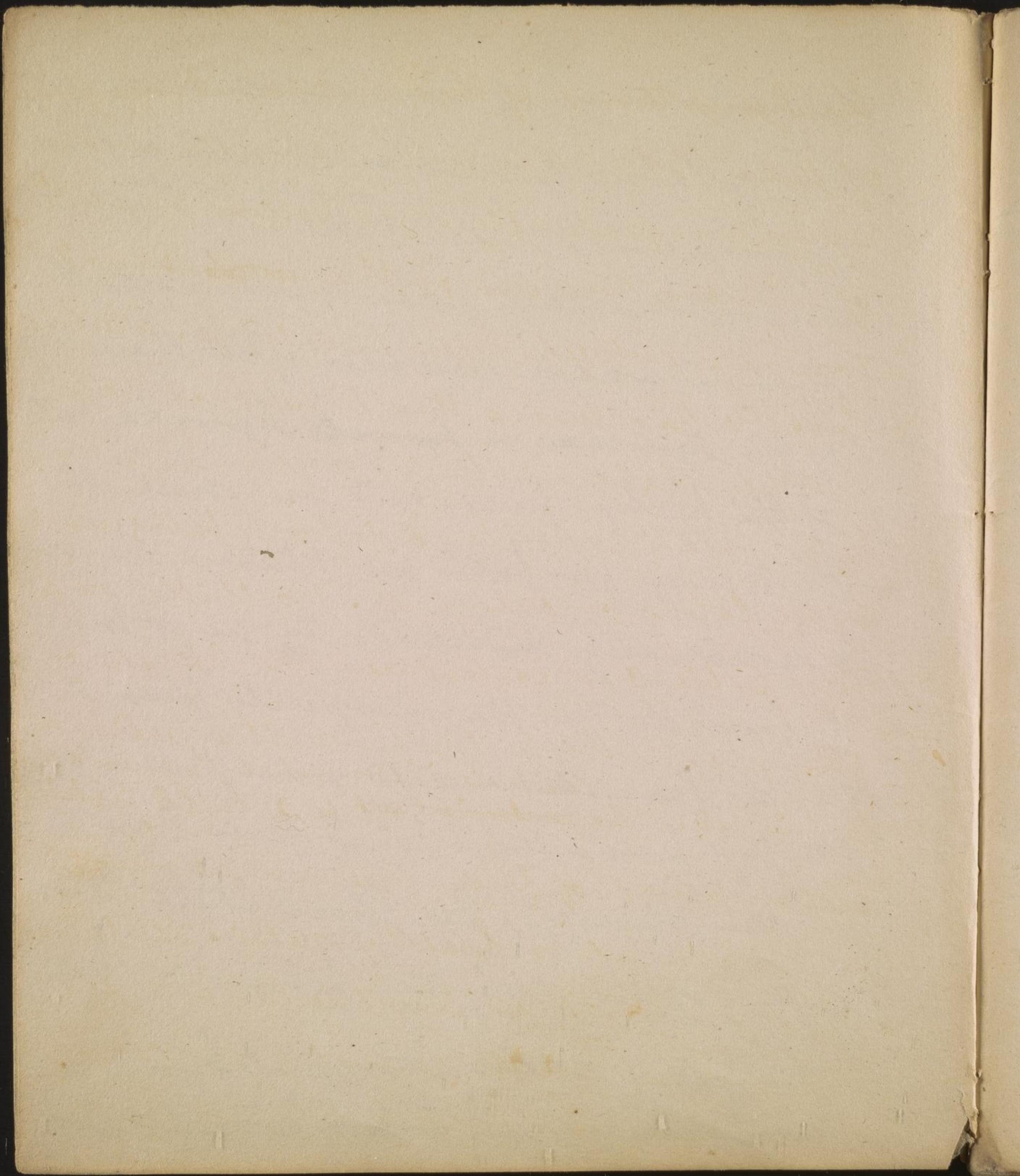
6

Yin 2
7398
F 6

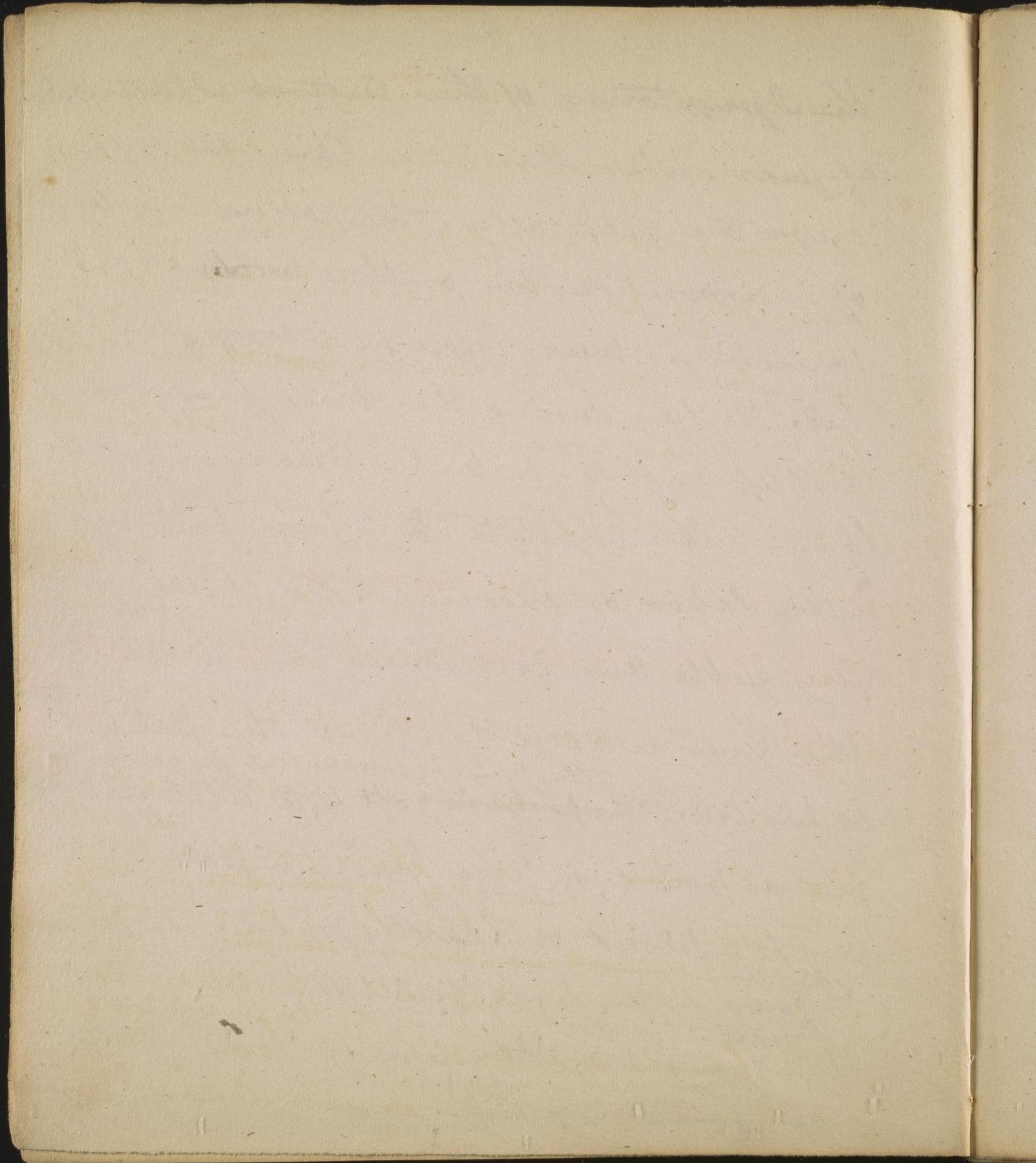
on the Cure of Fevers.



we should now in the order of
our syllabus to treat of the cure of fevers
morbis action,
accompanied with pulse, but there is
an intermediate grade of fever called the
Typhoid which partakes of the character
of the synochus or ~~synoche~~ synocha, and
of the typhus fever, and in which the
medicines for both are alternately or
occasionally indicated. we see it most
frequently in the præsperile fever &
in the Scarlatina and now & then in
the jail fever - the bilious fever & even
in the phthisy. It shott there ~~is~~^{are} no
none of the primary forms of fever
that do not sometimes assume it.
sometimes a fever ~~comes on~~^{comes on} attacks with



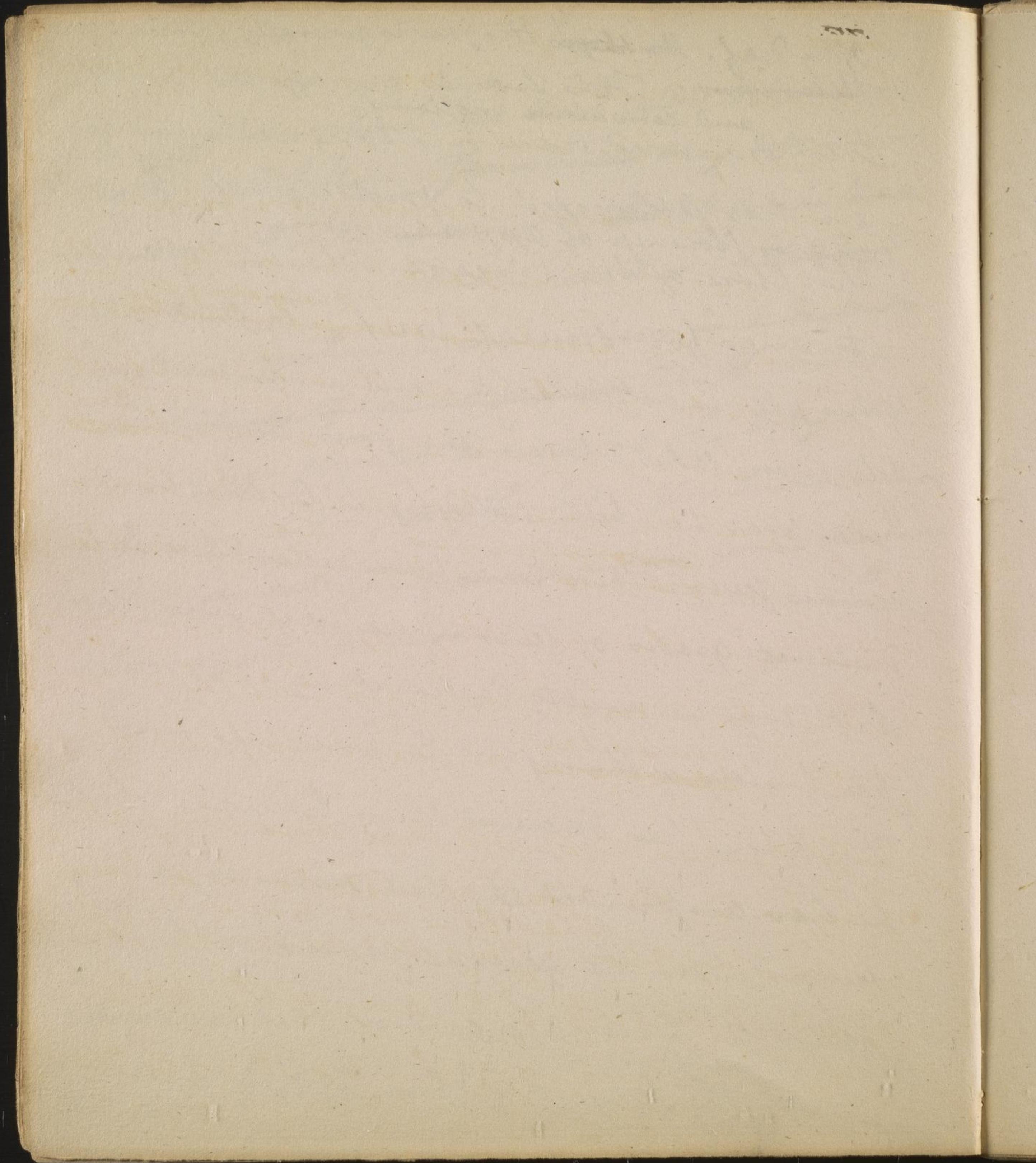
the dyspepsia of this intermediate grade
of fever. When this is the case, the disease
creeps on gradually. The patient complains
of indisposition two or three ~~weeks~~ days &
sometimes weeks before he is confined to his
bed. He has during this time head aches,
restless nights - disturbed dreams - a dry
thin - weak appetite. & is soon fatigued
with labor or exercise. no chills, or a
very public one introduces the attack of
the fever which confines the patient
The pulse is somewhat frequent,
to his bed. The pulse is soft & a little jerking,
but in point of force upon a par with
a natural or healthy pulse. the skin
is ^{hot &} dry - the head bewildered - and the
tongue ^{partially or} alternately moist and dry. It
sometimes continues for 20 or 30 days



without an intermission & with obscure remissions with but little change in its symptoms except ascending or descending in their force, but so little as scarcely to be perceptible. But it in this state it has received from Dr Butler the name of the slow nervous fever. But it more frequently ~~descends~~ into that state of fever which is called typhus in which the ~~feverish~~ pulse is weak & frequent, with a barely perceptable febrile jirk in the it - the ~~feverish~~ tongue ^{at teeth} is furred & covered with a dark mouth are dry - the skin is dry & cool, color. ~~the teeth are covered with fur~~ the urine is pale or more & then partially hot & moist. The bowels are costive, or loose - the patient is stupid - ~~or~~ convulsive, etc.

v This delirium has been called "delirium
nuit" by Dr Cullen. Sometimes this delirium
assumes the symptoms of the chronic state
of madness, in which state it is called by Dr
Cullen "Typhomania". - There is a ~~doubt~~
~~on account of apprehension the~~ lower
limbs are elevated to prevent the body de-
scending to the foot of the bed - glandular swelling,
abscesses and gangrene generally form the last
stage of this disease.

Often deaf. He staggers His jaw is generally fallen.
Delirious. His hands are affected with
and convulsive motions,
tremors; and even his tongue trembles
in his attempt to protrude it. Towards
nights or hours of apprehension. There is a
The close of the disease which often con-
tinues for several weeks, the stools and
urine pass involuntarily, and a muttering
delirium takes place. The fever with these
symptoms has been called by Dr Butter the low
nervous fever. There is a foundation for these
distinct grades of fever. You will find them
both very accurately described by Dr Butter in
his history of the infantile remitting fever. Dr
Thrusham has described them likewise, but
he has confounded the two grades or states of
fever, under the general name of the nervous
fever. - There are several vulgar errors
upon the subject of these states of fever
which



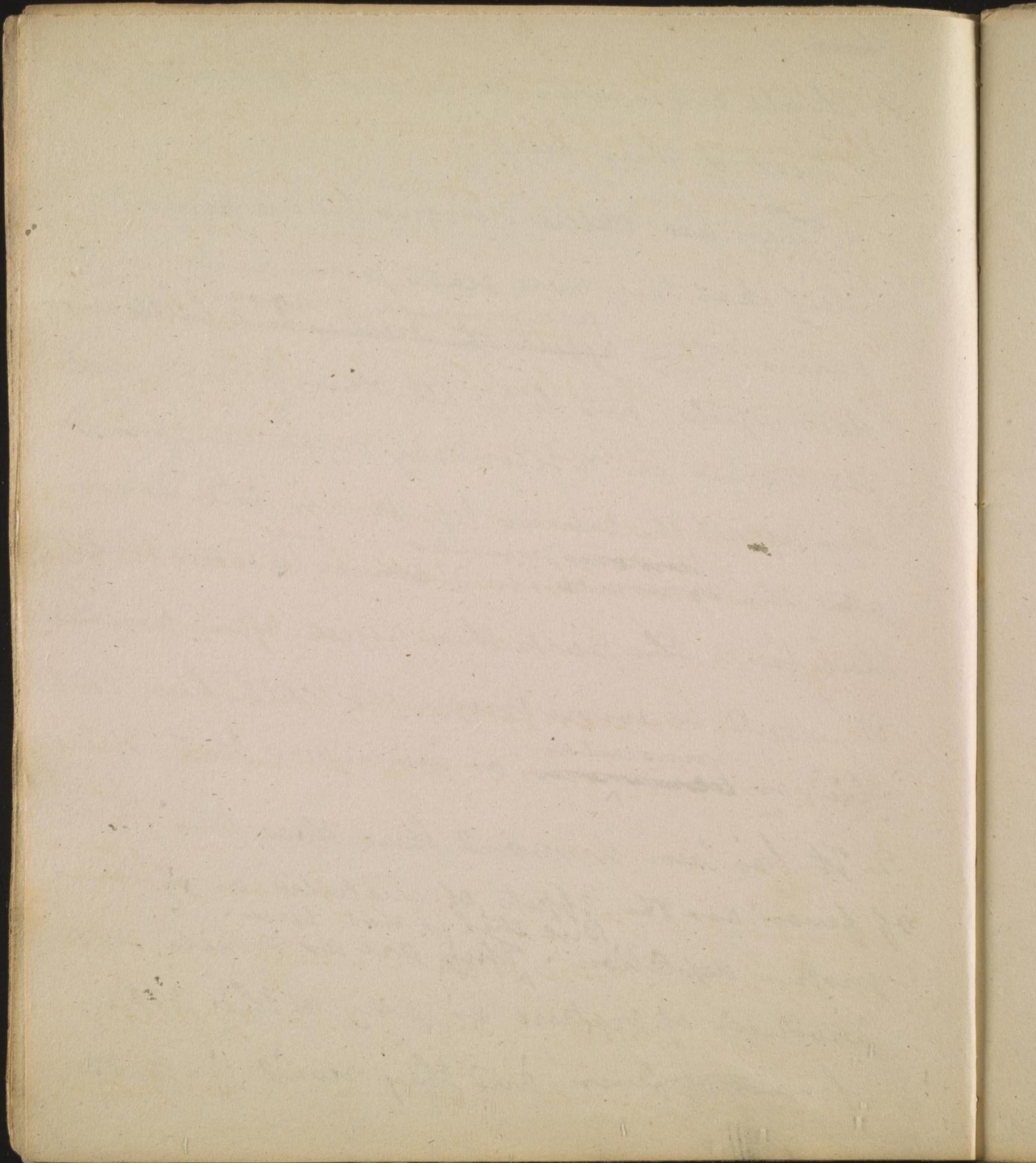
~~This~~

5

I shall endeavour to concert before we proceed
to treat of their cure.

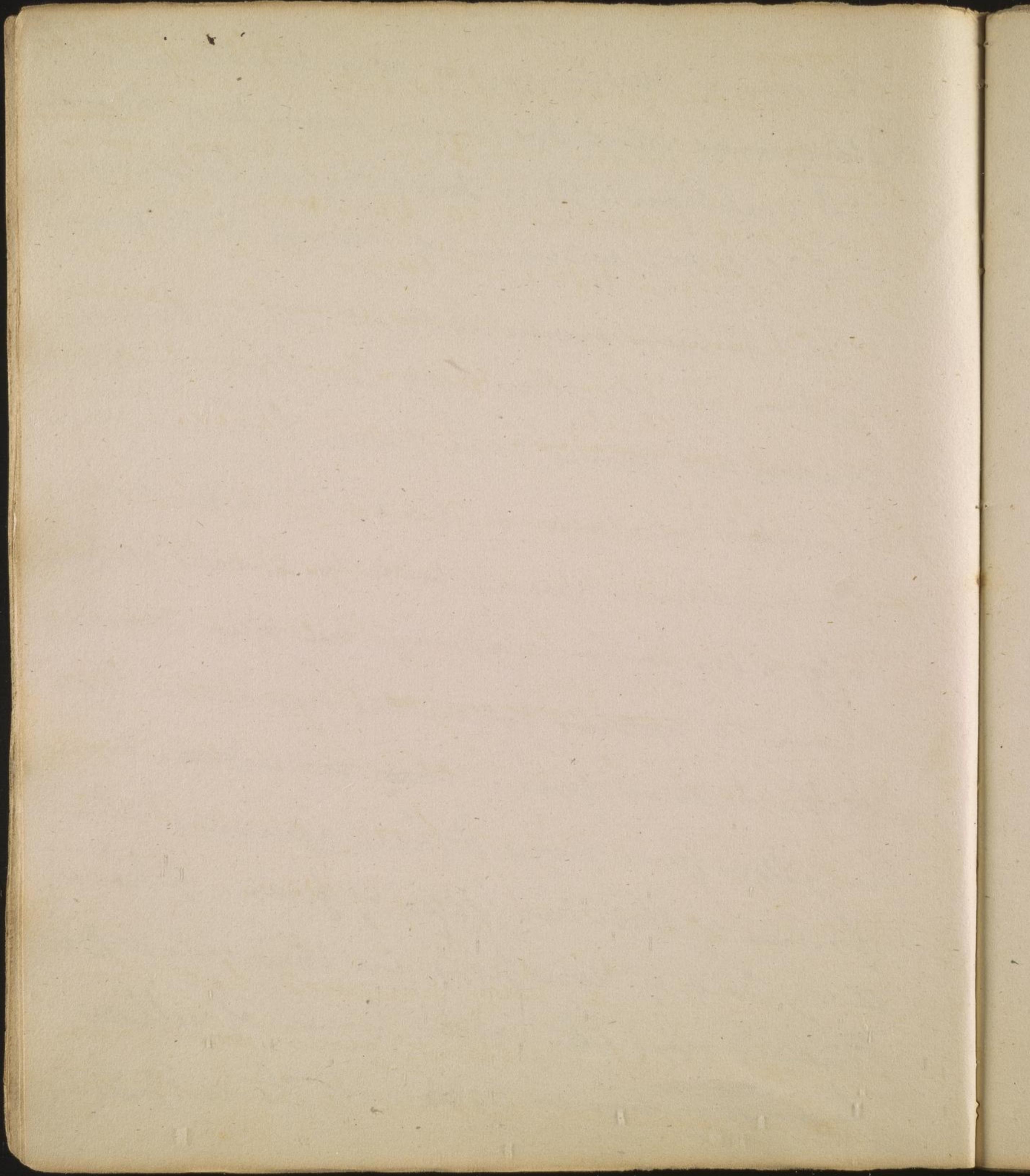
1 They are called nervous fevers from a
belief that they were seated primarily in the
nerves. They affect ~~the nerves but little more~~
blood vessels, and like all other fevers affect
the nerves in a secondary manner. ^{But} ~~the~~ ^{and} ~~the~~
they affect the nerves less than the brain
and the ~~tendinous muscles~~, and were ^{were} ~~were~~ to designate
them from the parts they affect hypothetically
it would be more proper to call them cepha-
-lic, or ^{spinal} ~~tendinous~~ or tendious states of fever.

2 It has been supposed that these two states
of fever are the effects of neglected, or of im-
proper depletion. ^{But this is not true.} They are as much the
products of nature as any of the other
forms of fever, and they resist with the



the same obstinacy all our efforts to shorten
it in course that obstinate fevers do of themselves:
- but duration. It is sometimes epidemic,
and it is the endemic of many countries.

3 It has been supposed that the typhoid &
Typhus, or the slow and conflates of fever
or Typhus are derived only from humanities:
- mataki exhalations, but this is an error;
we sometimes observe both to succeed the phisi:
city & the influenza, and we often observe
them to appear follow the hysterical state
of the bilious fever. They ~~now~~^{then} even
the yellow fever now often assumes the
forms of these two states of fever. I have
a typhoid yellow fever in this city, & Dr
Richard says the same form of yellow
fever sometimes occurs in the West Indies.



Antipodal
years

7

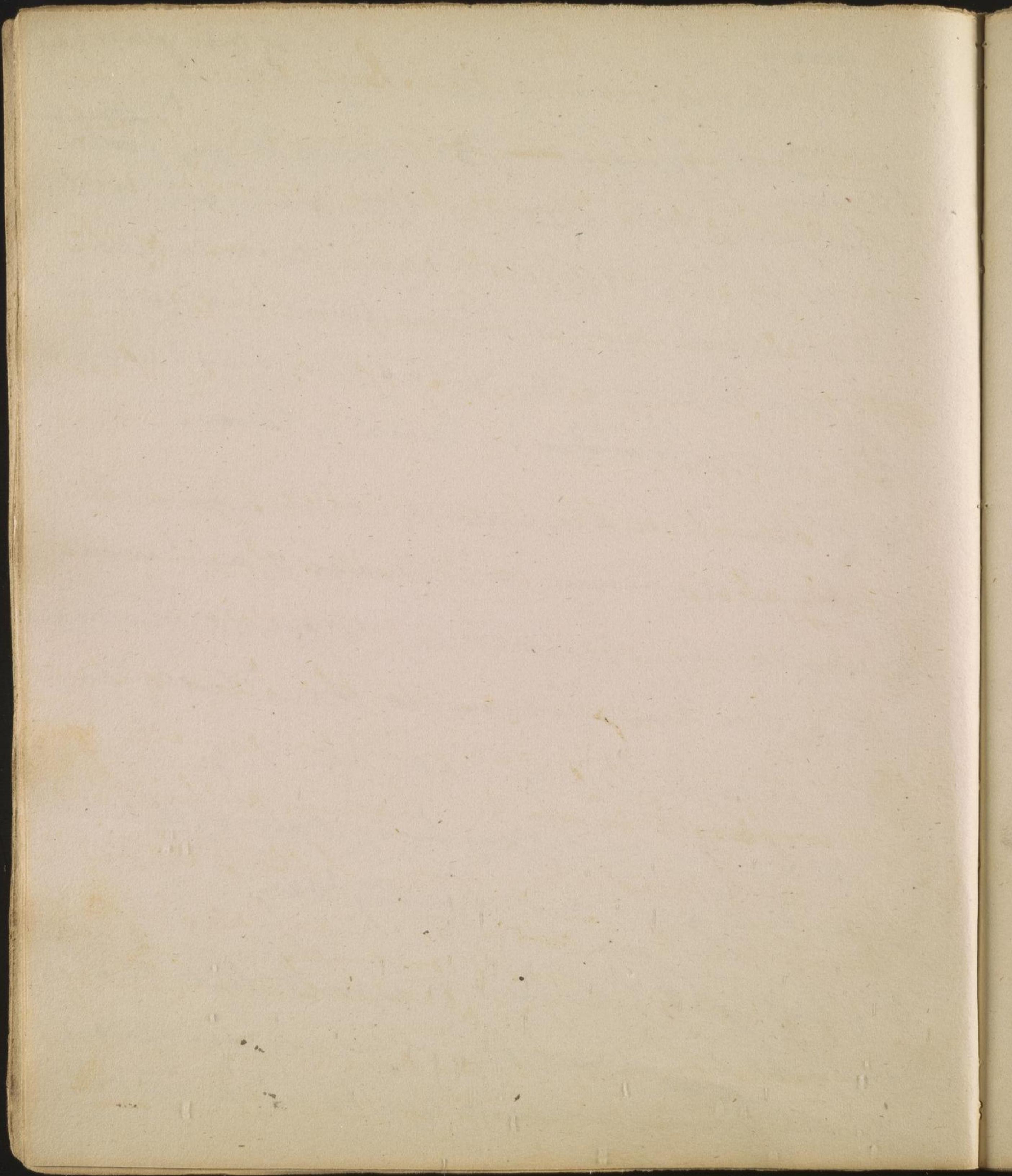
of late years has

The bilious fever of this city which now
run its course in 3. 5. 7 & 9 days; ^{about} ~~from~~
between the years 1760 and 1770 often ran on to the
20 & 30th Days before it came to a crisis.

This chronic form of bilious fever has disappeared
in our city since the yellow fever has disappeared,
~~but~~, but ^{chiefly} ~~now~~ in sporadic cases.

4 It has been supposed that the typhoid &
typhus states of fever are always of a chronic
nature. This is contrary to recent observa-
tion. We ^{often saw} ~~would observe~~ them both ter-
minate in life or death in 7. 9. 11. or 14
days in the military hospitals of the United
States during the revolutionary war.

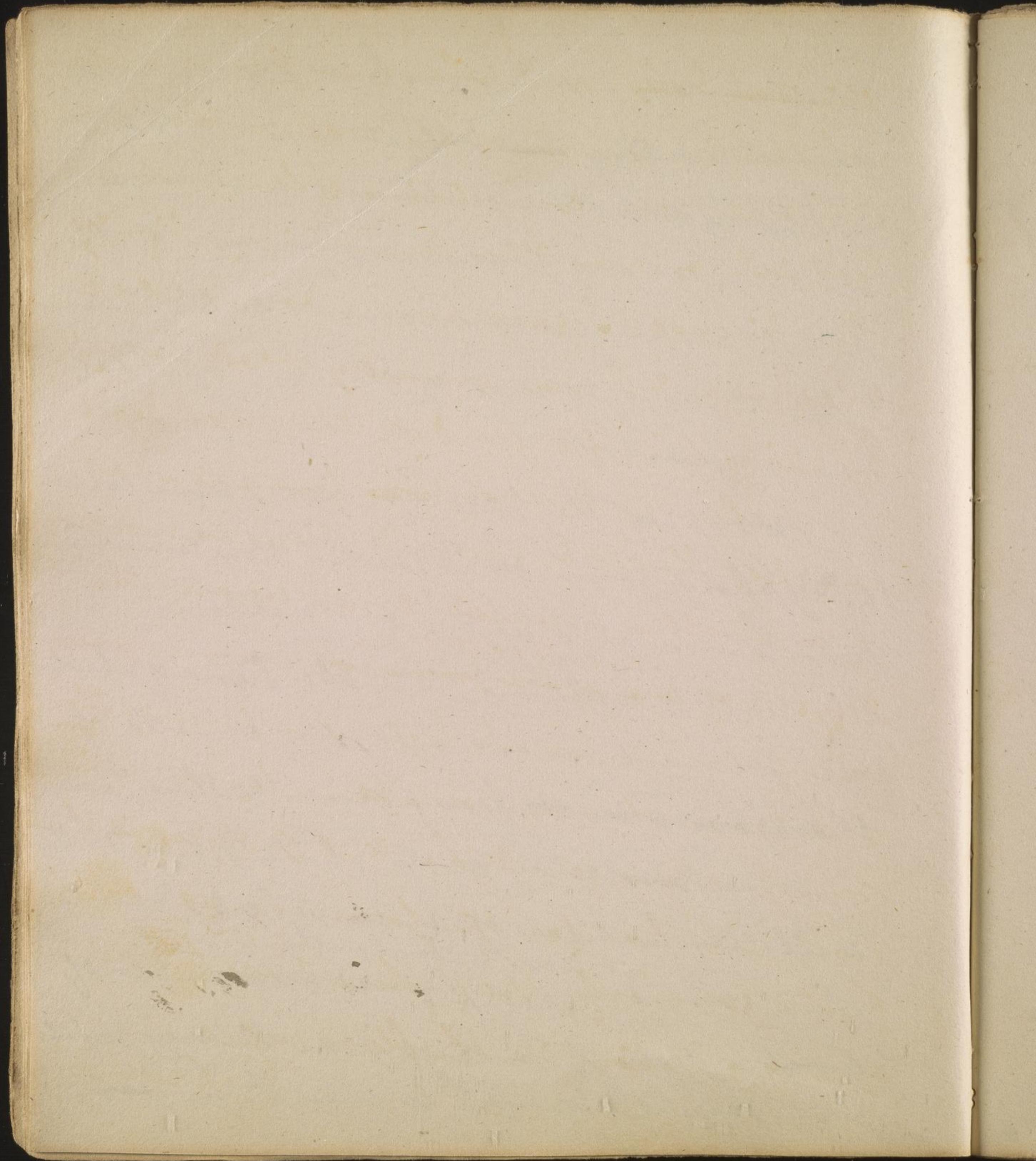
5 Lastly it has been supposed that the
typhoid & typhus states of fever, ~~are~~ ^{are} not
more protracted than others are to be used only



by stimulating remedies, but experience teaches us they ~~are~~ sometimes yield only to blisters and other depilating remedies even in their most protracted forms. Of this I shall mention some remarkable instances when I come to treat of the cure of these states of fever. —

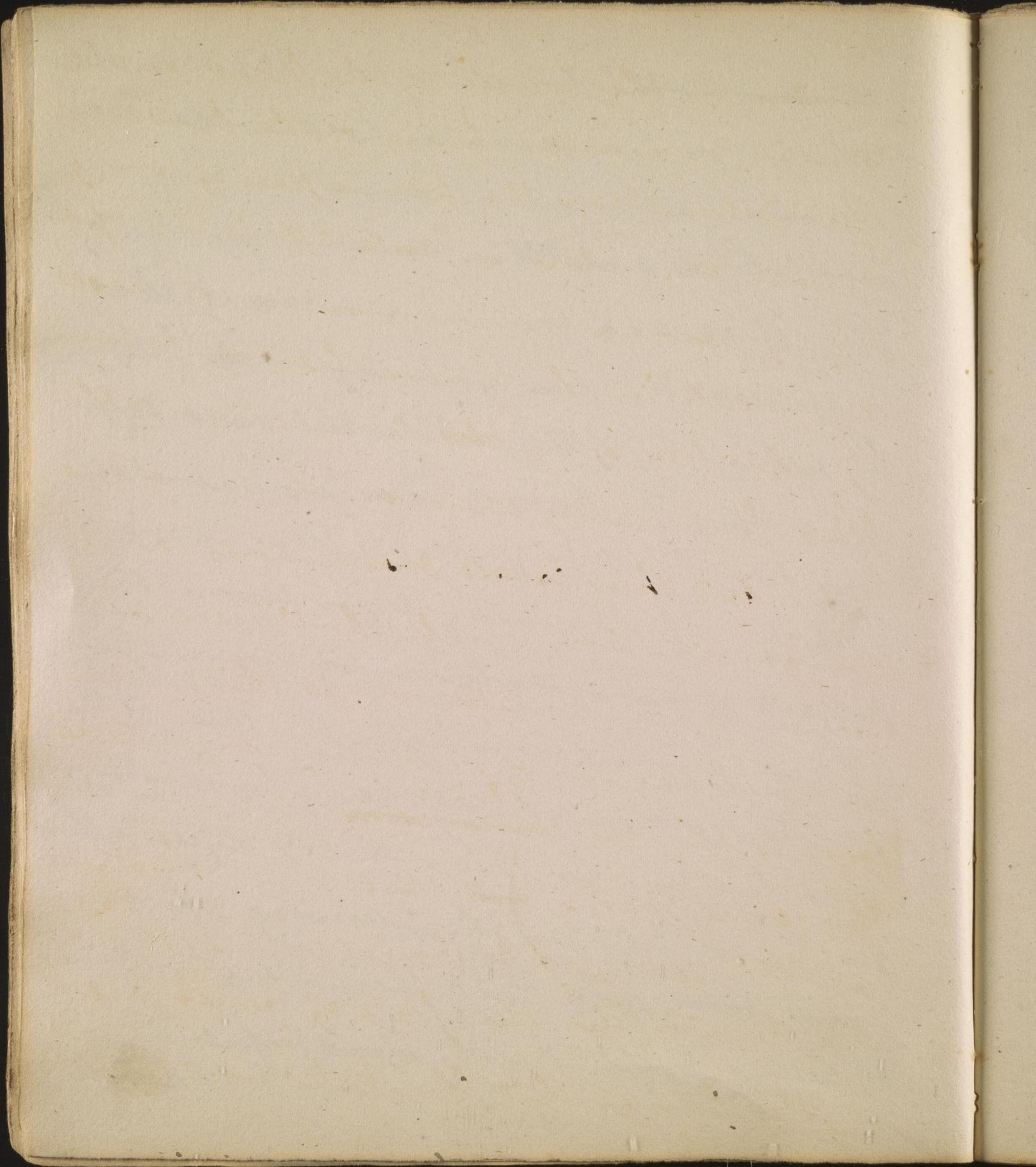
To state the cure of what I have called the typhoid form or Dr Butler's now famous fever comes first under our notice.

In its forming state (the signs of which were formerly mentioned) an emetic often cures it in a few hours. Of this I had many satisfactory proofs while I attended the military hospitals of the United States during the revolutionary war. I constantly carried a number of emetic doses of Tartar emetic in my pocket with printed directions ^{how} to take them, in

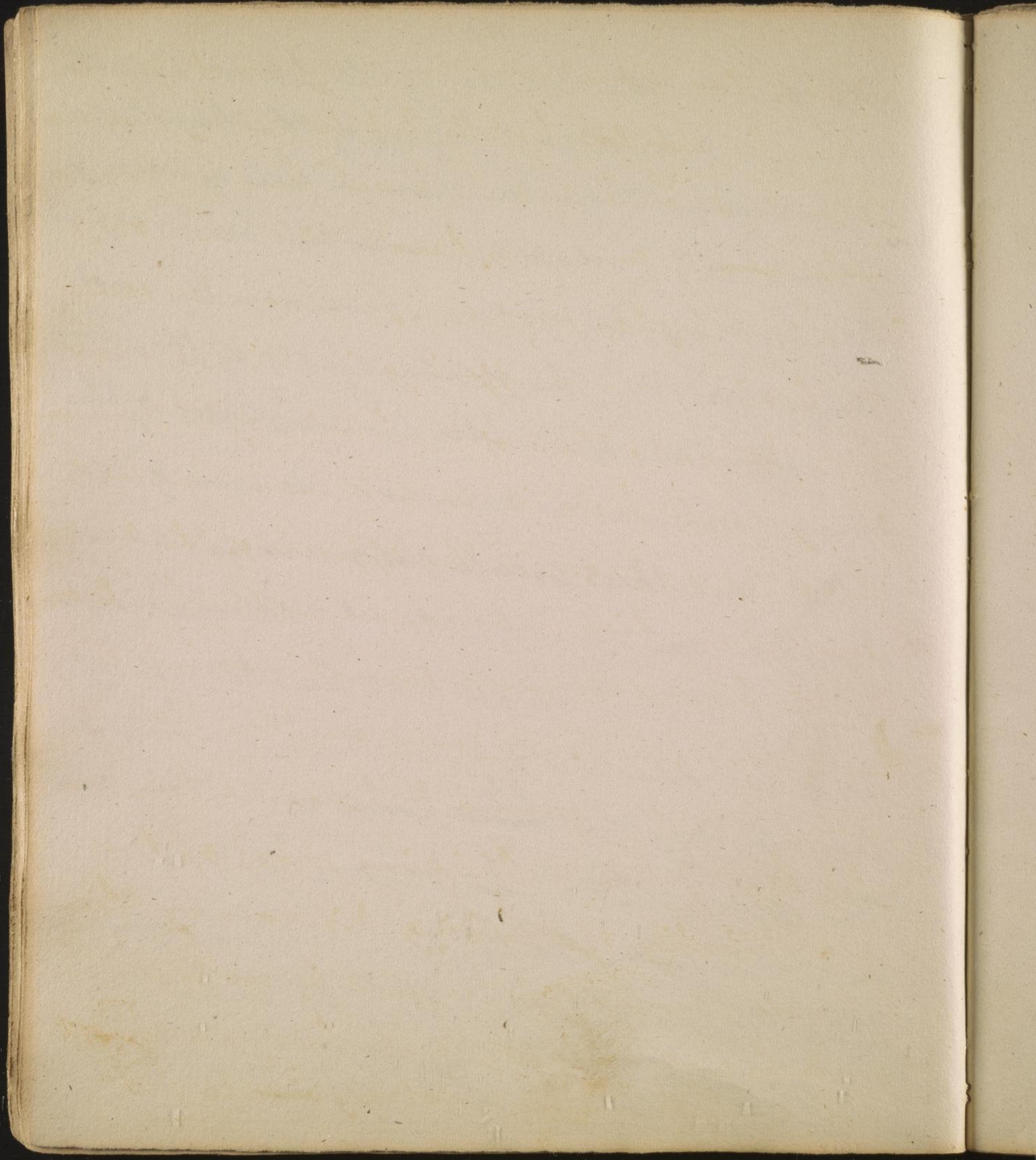


~~divided doses~~, and whenever I met a soldier
whether in camp, on the road, or ^I in a
hospital, who complained of languor -
had a or any other premonitory sign of
this disease, I gave him a dose of that
medicine, & I was generally made happy
by seeing him fit for duty the next day.

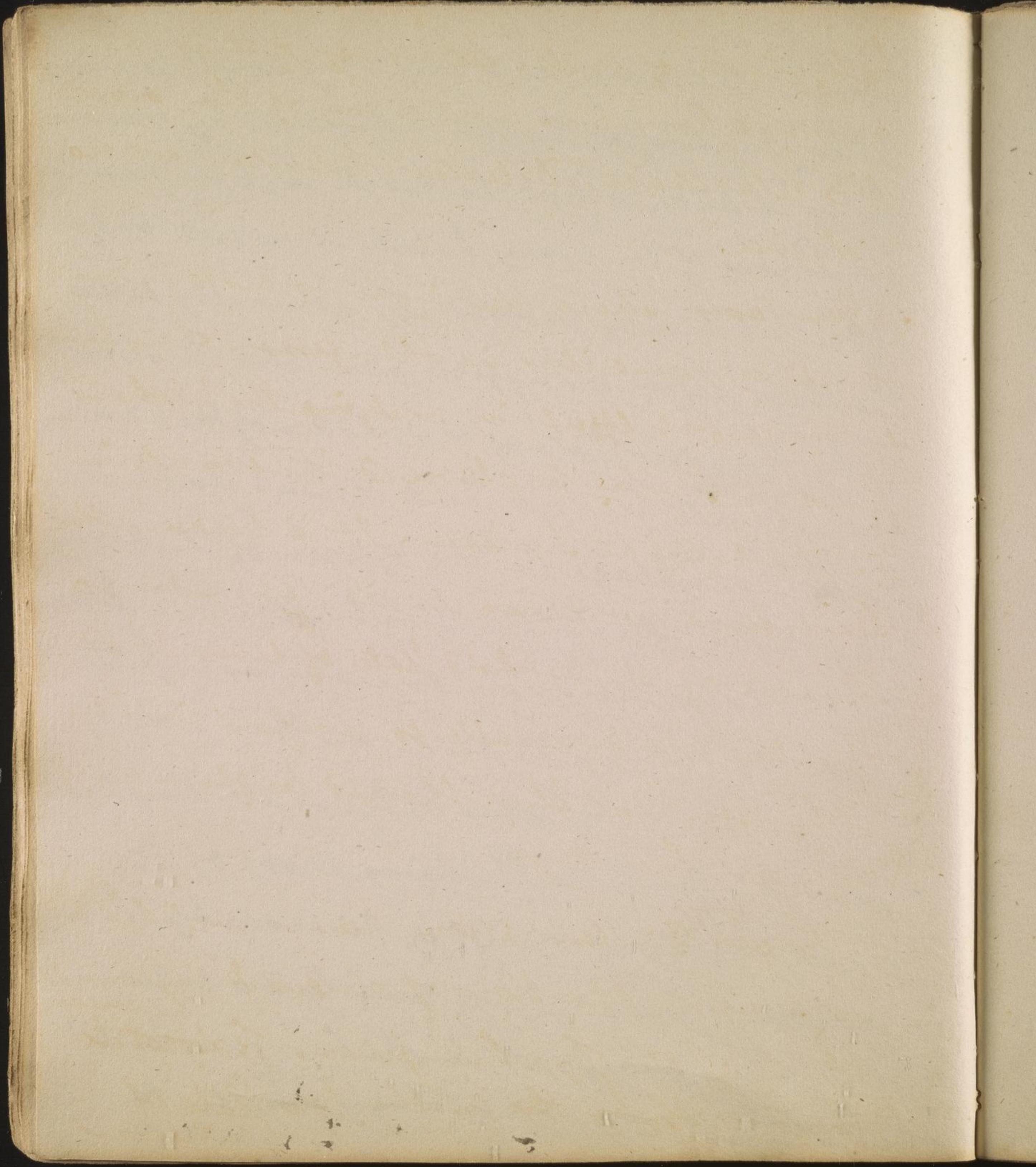
After the disease ~~was~~ ^{is} formed what
remedies should be given? Here we meet
with another popular error upon the
subject of ~~one of the forms of~~ ^{what is called the} nervous fever.
It is common to begin the cure of the
typhoid, or slow nervous fever by exhibiting
stimulating remedies. But I object to their
use, and that for the following reason.
I said formerly that there were two kinds
of wrong action in the blood vessels in
fever,



- the one in the course of the blood, and the other in muscular fibres of the blood vessels themselves. Now the former state of wrong action takes place in ~~not~~ all parts of a highly morbid action, nor does it cease completely in the typhoid state of the fever. In this state of the ~~the~~ circulation of the blood, stimulants increase its wrong direction, and thus create obstructions, and disorganization in all the viscera. were we sure nature would not do this mischief without the aid of medicine, it would be best to obey the ^{Advice} ~~command~~ given in our therapeutics, and that is "to do nothing" but this cannot be done with safety. The remedies for this state of fever are
 1. Bloodletting. This should be used with

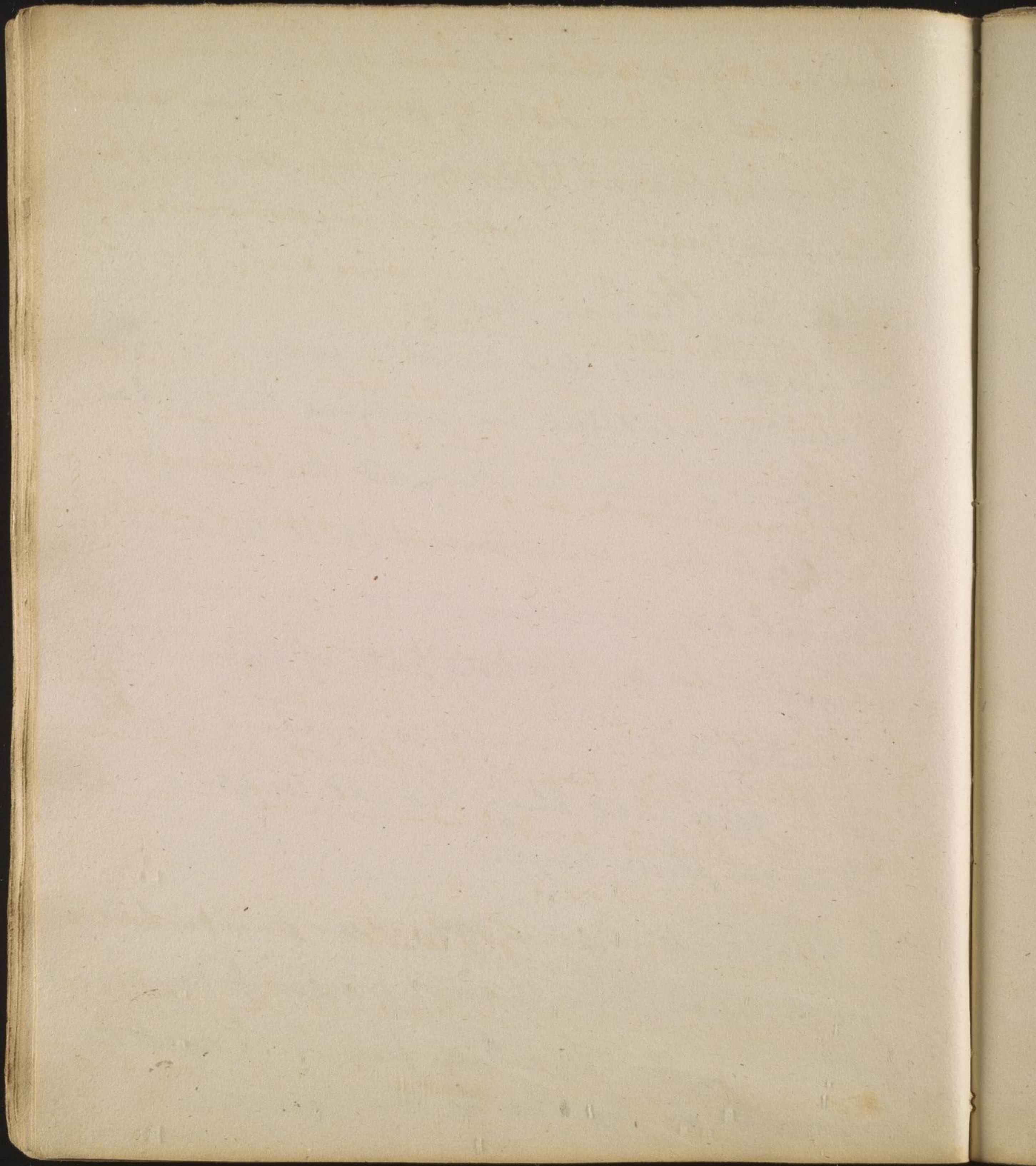


great caution, and in very small quantities. In habits debilitated by previous or low living labor it should not be used, but in persons who have of contrary habits it is not only safe, but highly proper. It generally saves the brain from suffering in the course of the disease. Few of the soldiers of the American army could bear it, but it was used with great advantage in the officers of the army who from their intercourse with their men in the hospitals were sometimes infected with this fever. It came on this class of patients with hysterical & hysterical symptoms. See heregent: a striking proof of the impracticability of dividing diseases by their remote causes: There will be no order in medicine, nor safety to the human race till we remove ^{with} ~~without~~ ergology ~~with~~ all its



labyrinth of evils.¹² Let us say of it as the
ancient Romans used to say of their rival
city of Carthage: "Delenda - Delenda - est no-
=nologia."

2 Gas Coas where bleeding is forbidden tonics
should be prescribed in this fever. They have
a wonderful effect in untiring the typhoid
knot (if I may be allowed the expression)
in the arterial system. It is because the
partitioned parties in its character so
much of the typhoid fever that
sometimes are generally so useful in it.
To be effectual they should be given every
two or three days.



fever, I object to them, but if he means - the typhoid fever or low state of fever, I have no doubt of their safety and efficacy. They carry off bile, and prevent visceral congestions. To be useful they should be given ~~once~~ every day, or two or three times a week.

4 Nitre, or the antimonial powder is both safe & useful in this state of fever when it is not derived from a form of the bilious fever, in which case it is generally offensive to the stomach.

5 Blisters or gentle warmants have been used in this state of fever. They keep up a central determination of the fluids, and thus save the brain and abdominal viscera from obstruction.

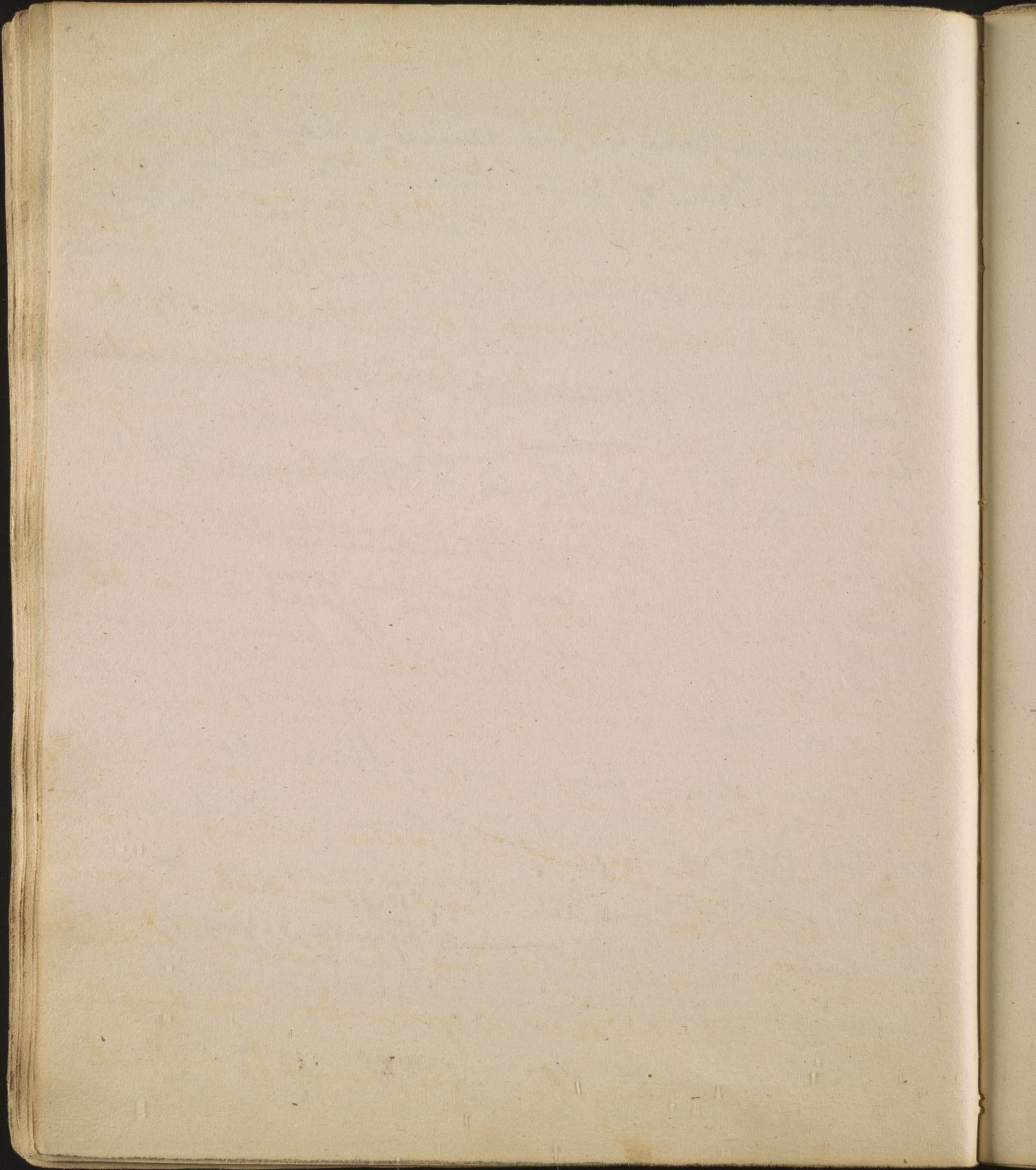
6 Abduction with cold water, and perhaps its affusion. The latter will be most safe when the typhoid affection is descending to

V 8 It is possible Dr Jackson's remedy of
Gestation might be employed with ad-
vantage in this fever, but I can say
nothing in its favor from my own ex-
perience.

the typhus action.

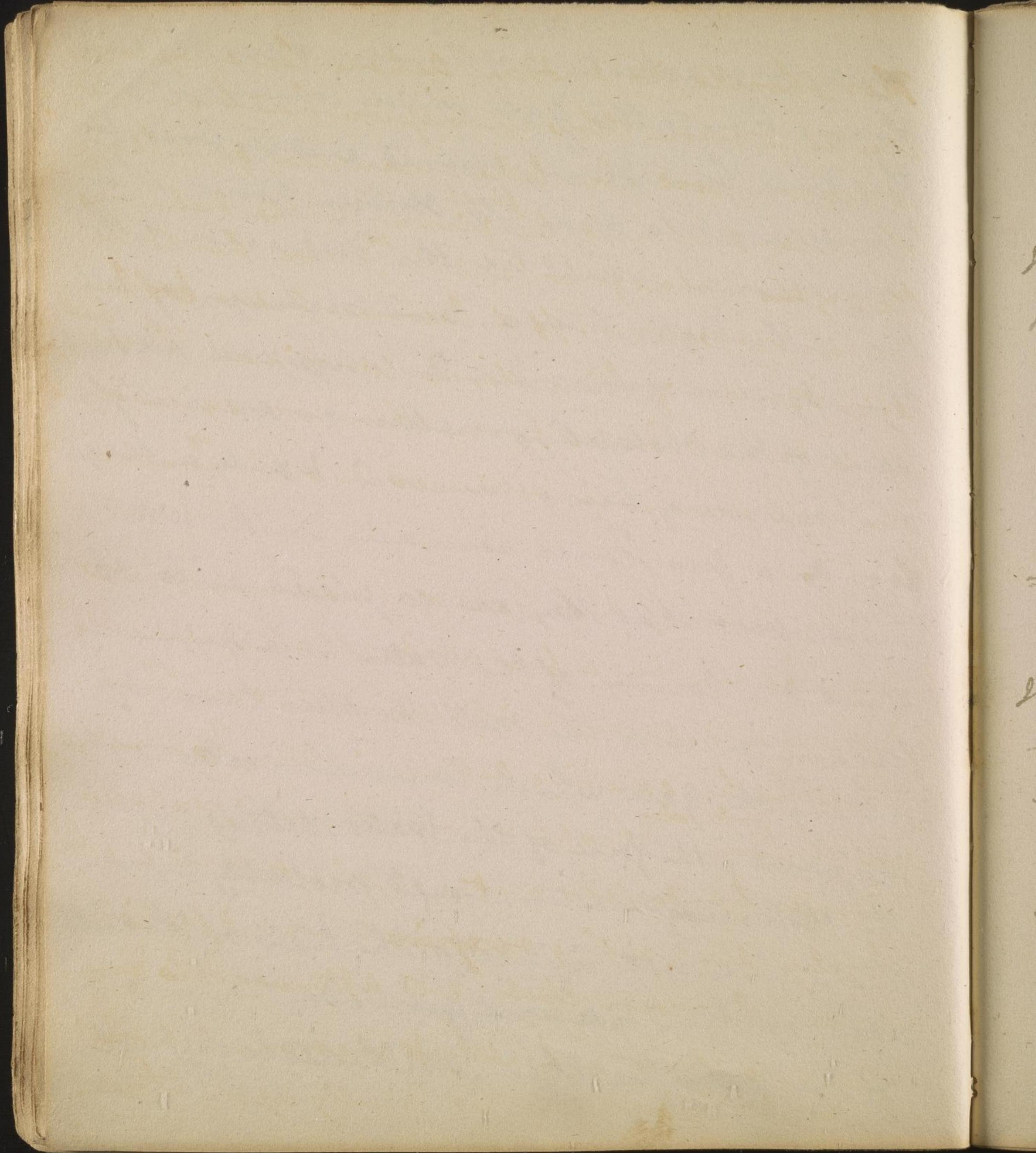
of a salivation. This remedy has succeeded in this state of fever when all others have been employed to no purpose. It acts is difficult to determine the mercury to the salivary glands, and I am sorry to add I have much often failed, than succeeded in exciting a salivation by it. V

These Remedies should be continued till the typhoid action of the pulse is nearly subdued - I say nearly subdued, for there are cases in which there is more danger from the fever terminating in death from an exhausted state of the system, than from using stimulants a day or two before the typhoid action in the arterial system is completely worn down, or descending to the typhus state with a small degree of a wrong direction in the circulation of the blood. I shall illustrate my meaning by a simile. Suppose a mill race to be suddenly obstructed



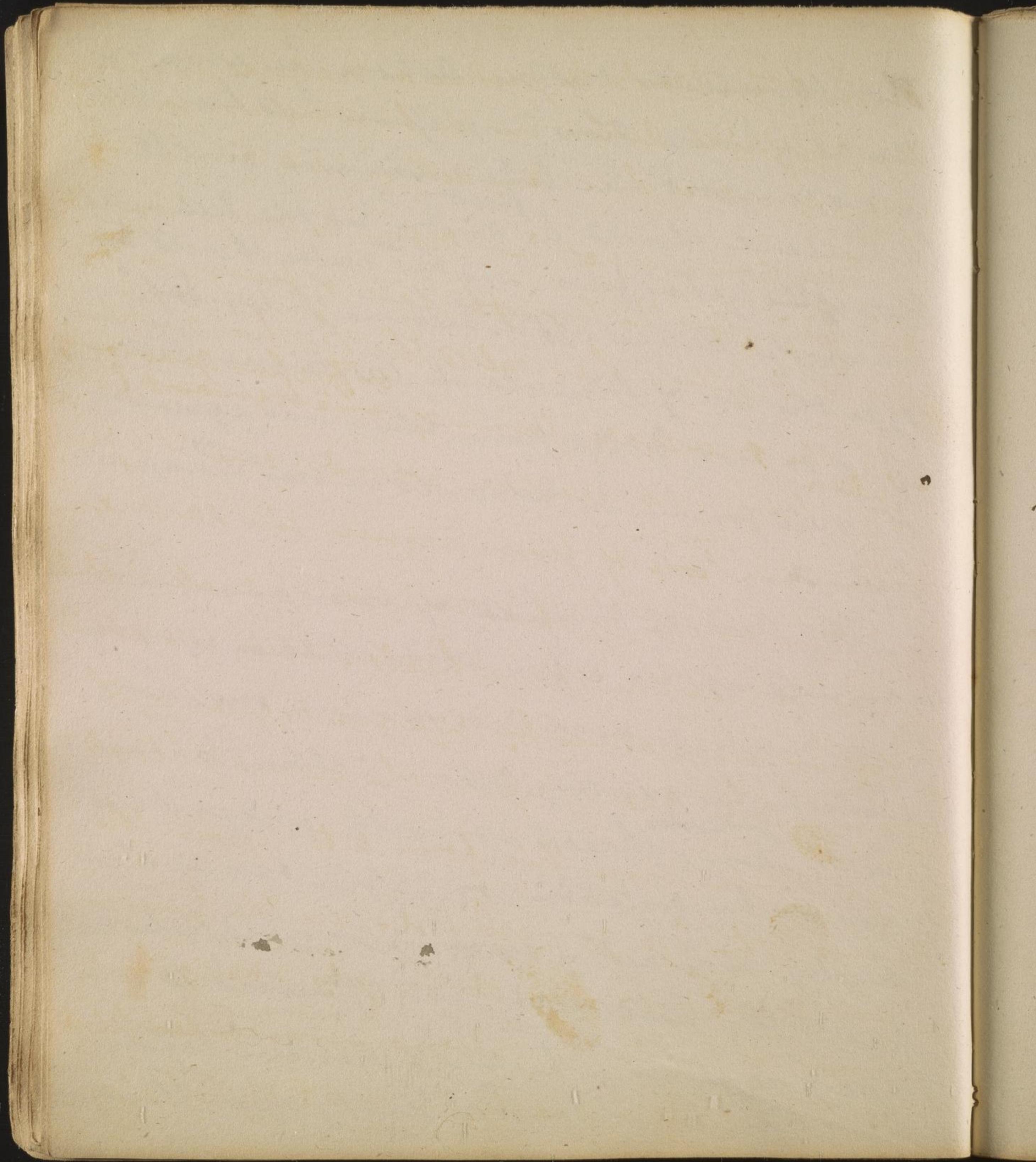
15

by a large collection of timber, & earth, and stones. Should the gate which conveys water to this dam be suddenly opened, and its force be insufficient to open its obstructions, the consequences would be the destruction of the sides of the water course, and perhaps of all the adjacent grounds; But suppose all such parts of the obstructing matter as are in sight, and capable of being removed, & only a large dog, or a few stones remain in the water course, but that they are so placed as to obstruct the course of the water in a sufficient stream to turn the mill. In this case, by opening the gate which communicates with the dam, the force of the water, acting upon the obstructing matter, would probably remove them without injuring the sides of the mill race, or the adjacent grounds. The impulsion of the water in this case should be gradual,



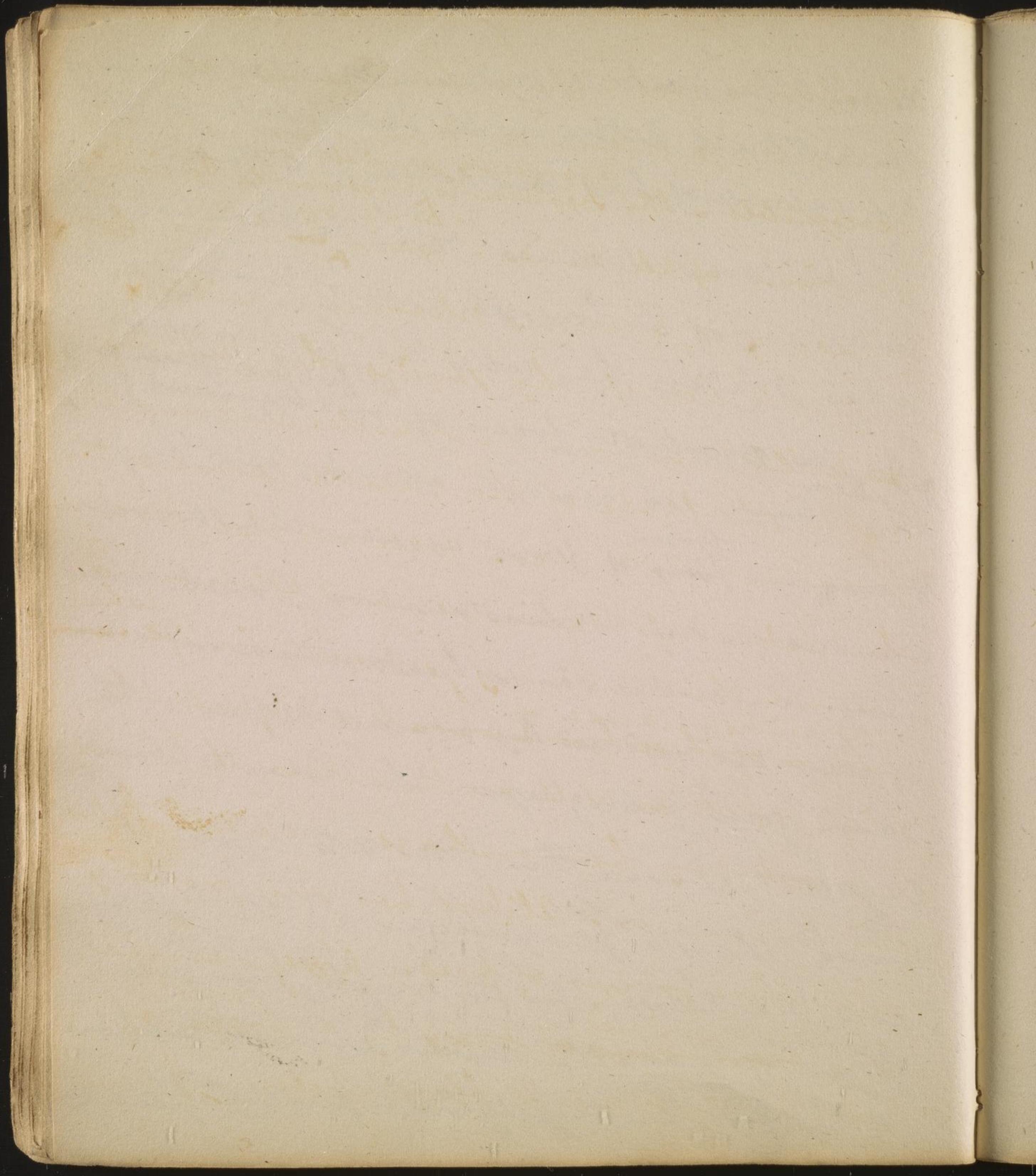
Nor should its sudden action be employed, until a more slow impression has been tried to no purpose. In like manner, gentle stimulants should be given ^{first} in the declining state of the typhoid fever, and the pulse should be narrowly watched. If it become fuller & slower after the use of stimulants, continue them, & if it do not, desist from their use agreeably to the rule formerly delivered in our Therapeutics.

The cure of this state of fever may be summed up in a few words, that is, agreeably to the second general indication in our Therapeutics by exciting action in the Stomach bowels, Skin, ^{glands} throat & mouth, and perhaps muscles by postition, or passive exercise of thereby abstracting ~~excess~~ morbid action from the blood vessels, and afterwards to impart to them a healthy & vigorous action by medicines which act directly upon them,



or in other words to produce a natural, instead of an artificial action in the blood vessels, for they are capable of but one action at a time.

We come next in order to mention the remedies for the low off state of fever, or for what Dr Cullen has called the Typhus mixture. As the moderate form of ^{or Typhus Gravior} malignant fever ^{in which no reaction attends, and the same} Dr Cullen ^{form} requires the same remedies as the typhus mixture, I shall include them under the same heads. These two forms of fever are produced by different degrees of the same force acting upon the nerves & blood vessels. The more this force acts upon the nerves, the less garrulous are the symptoms, and vice versa. In the singly, malignant form of fever, the nervous ^{of muscular} fibers of the body are nearly in a paralytic state,

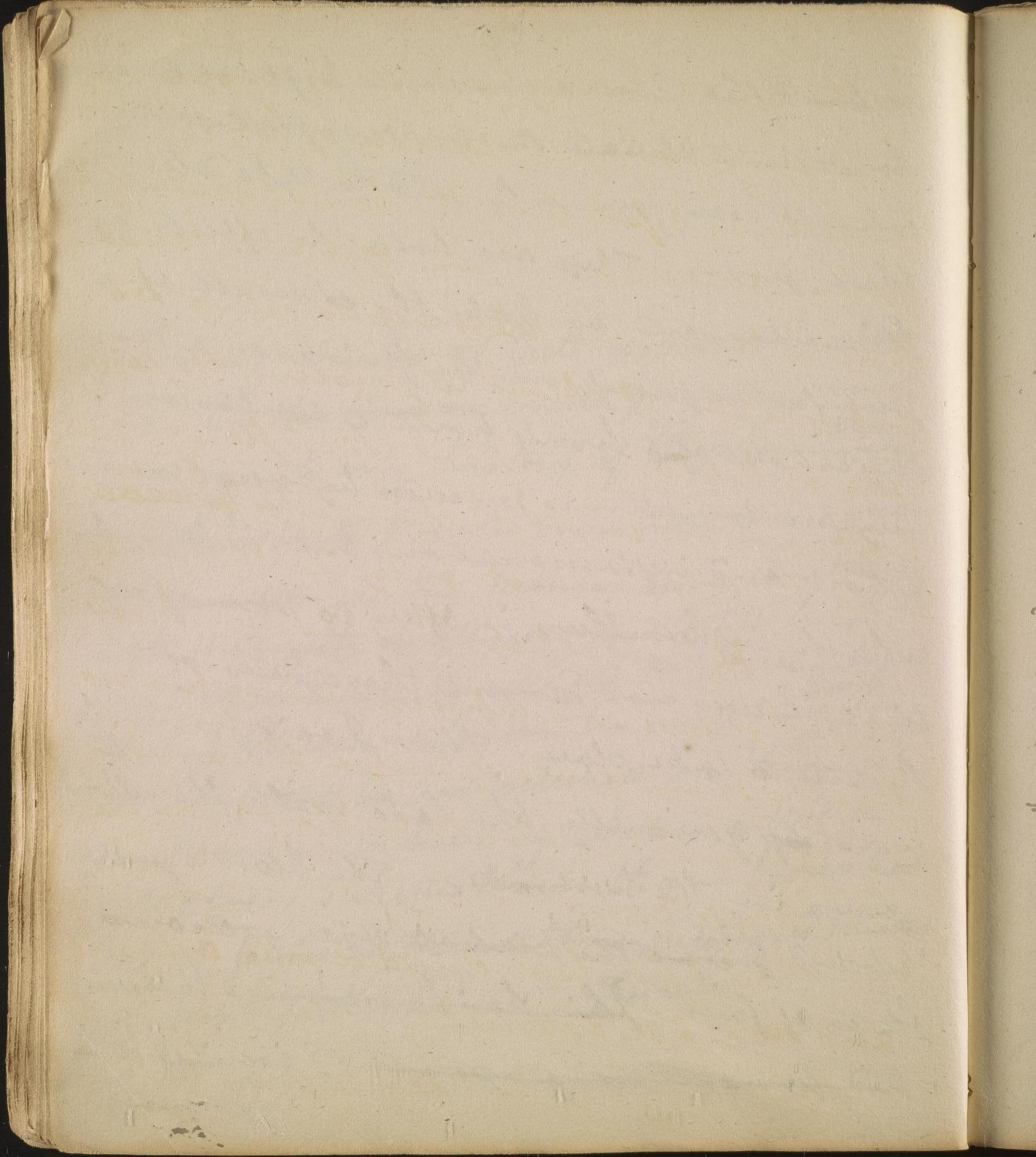


the skin is cool - the pulse is feeble, often nra-
 tural as to frequency, & sometimes scarcely
 perceptible - the system is ^{exquisitely} ~~insensible~~^{insensible} to im-
 pressions of all kinds - ^{is acute, or} ~~pain is absent,~~
 instead of it, a morbid pleasure is felt which
 patients express, by saying "they feel too
~~so~~ well." Sometimes the muscles are exempted
 from the stroke of the remote cause of the
 fever, in which case patients rise from
 their beds, drop themselves and attempt to
 resume their ordinary pursuits in life. ^{when} ~~with~~
 the remote cause of the ~~many of these~~ fever affects the
 blood vessels as well as the nerves, the disease
 is marked by hemorrhages, petechia, bubos
 and carbuncles. Alibert has very properly
 called these forms of fever Aægmannie.
 They are occasioned ^{kind} of body by a ~~yeatle~~ of
 fulness in the nerves & blood vessels. - I have

For a number of facts opposed to putrefaction in the blood in malignant fevers I refer you to my history of ~~the~~ phenomena & To those facts I shall mention one more. Dr Hamilton in his lectures upon Anatomy in the University of Glasgow used to tell his pupil that while he attended Dr Wm Haughton's dissecting theatre in London he uniformly observed dead bodies that had putrefied on them what you know are produced by what is called a putrid fever, putrefied fewer than bodies that died of fevers without those supposed marks of putrefaction.

Herrick

prefixed the terms prostrate & gangrenous,
in order to obviate the error of precipitation
which was formerly said to take place in
these fevers. They are both the effects of
stimulus, and as little the result of a
putrefactive process in the fluids, as a mor-
tification of a limb from a contusion.
They are sometimes preceded by great morbid
action and inflammation, but the stimulus
which induces them is often so powerful,
that it does not permit those states of the
system to take place. This I said formerly
was ~~as~~ generally the case with the yellow
fever in the West Indies. The blood is generally
dissolved ~~from~~ in the prostrate & gangrenous
states of fever. This has been ascribed to a pa-
tent ferment acting upon it. I ascribed it to
formerly

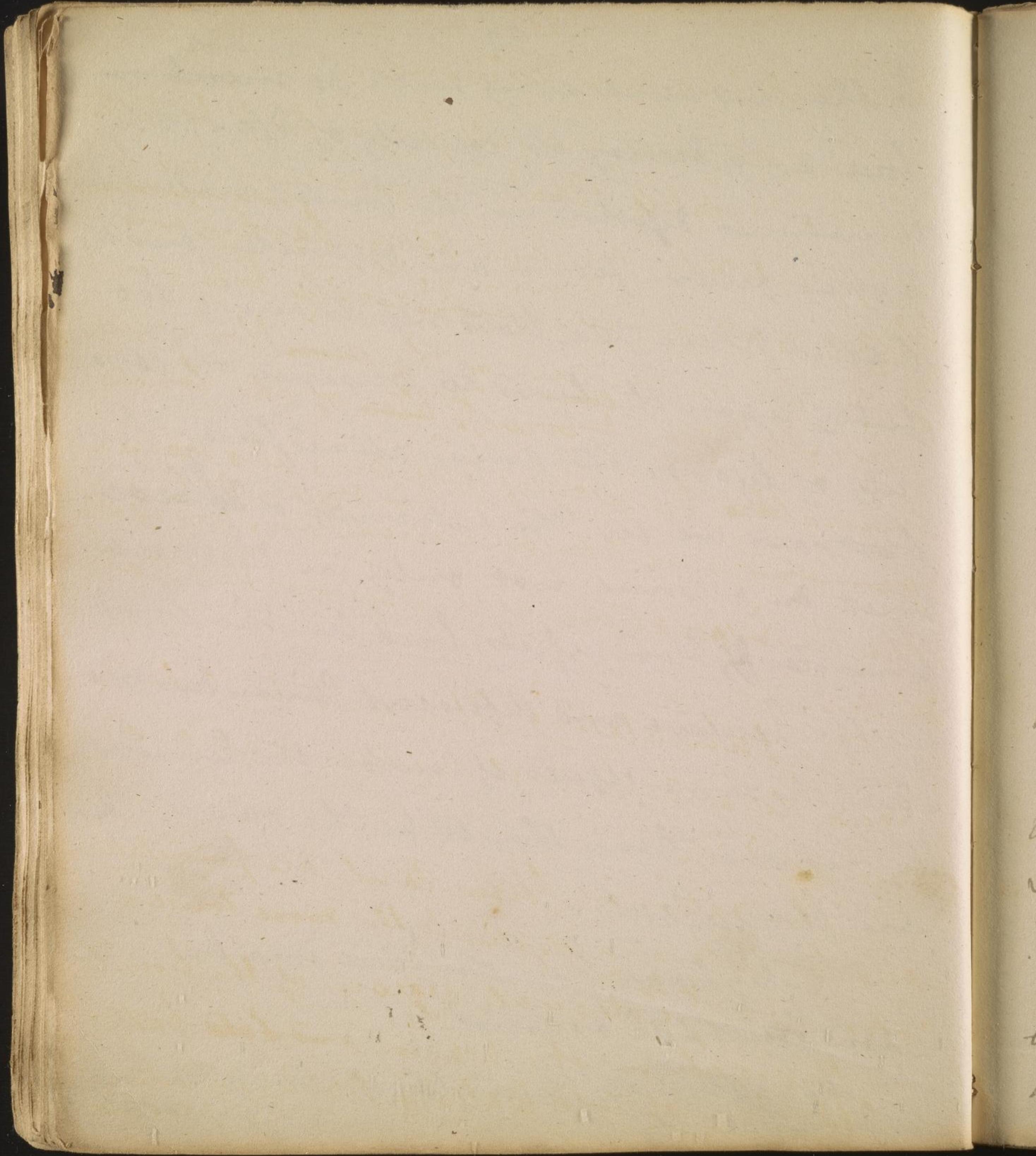


much

to the blood vessels acting with so much force as to destroy its capacity of life. It is sometimes dissolved in the lowest grade of the typhus fever - from an opposite cause, that is from the blood vessels acting too feebly upon the blood to preserve its capacity of life, or its animalized state. Thus blood and we see the extremes of ~~disease~~^{fever} meet in a point not only in the nerves, muscles & blood vessels, but in the blood itself. Excessive and deficient stimulus produce the same effects, of course the Remedies to remove them should be the same. Then are Stimulants.

They have been divided into ~~internal~~ and ~~external~~ external.

The internal stimulants may be divided

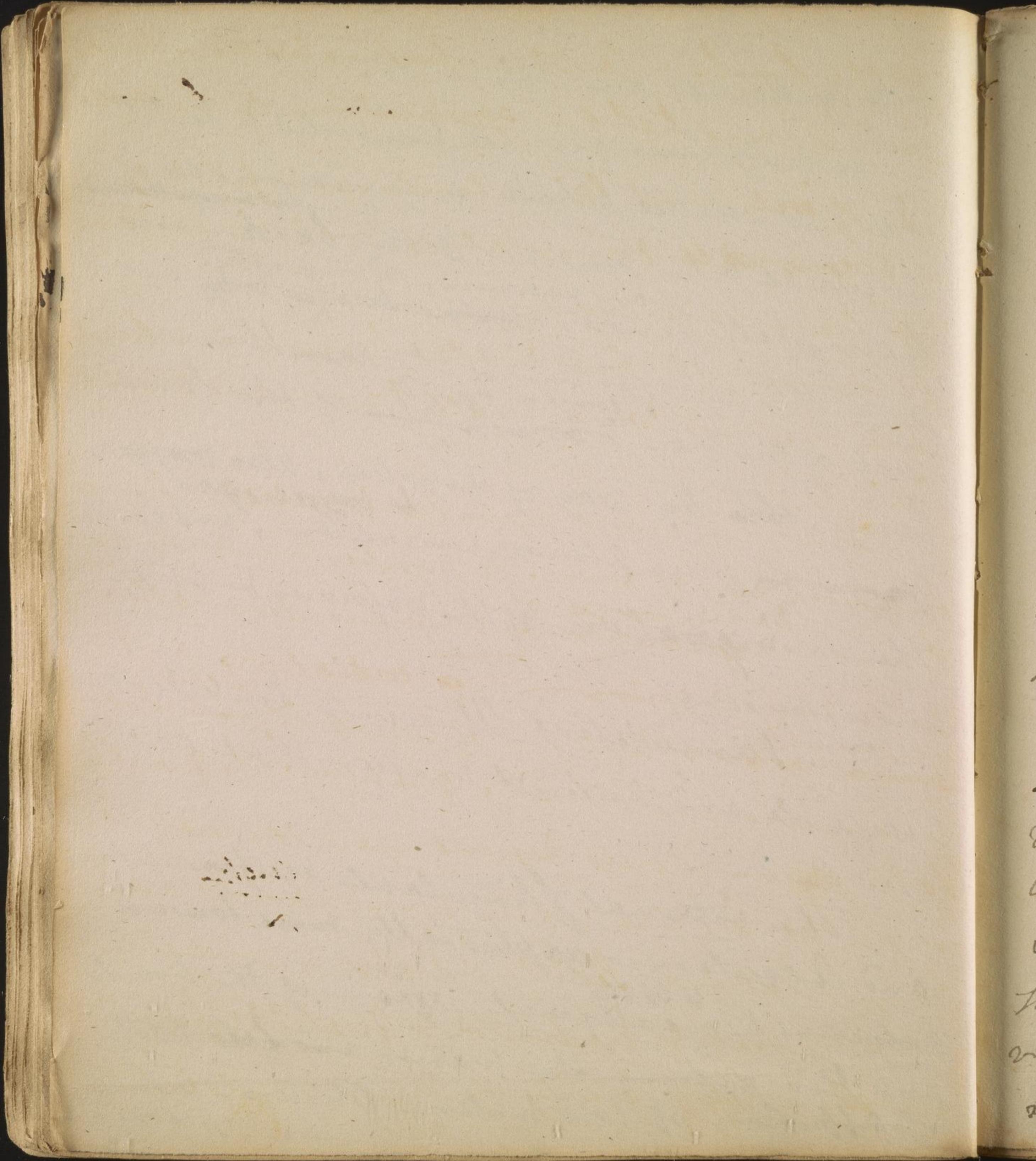


into medicines and Arients.

The Medicines are, all fermented & distilled liquors, volatile Alchali, Camphrenate &
essential oils, Opium, Other, bark-^{bitternafftions}
and mercury, Amirthed
bitters of all kinds, ~~afforded so she doy~~ not
only this the medium of the ~~same~~ Stomach,
but of the more ~~Stomach also~~ ^{lower} and
bowels thro by way of Glysies, also vapour
gas and pure Atmospherical air, and lastly
the invigoration of the pupines & the
understanding.

The Stimulating Arients include the
vegetable and animal matters that are
used in diet.

The external Stimulants are fomentations
and Cataplasms applied to the ~~same~~ lower
extremities, ^{& to the} external regions of the bowels
and Stomach - the warm and cold bath,
affusion of cold water - Blisters - cata-
-plasms

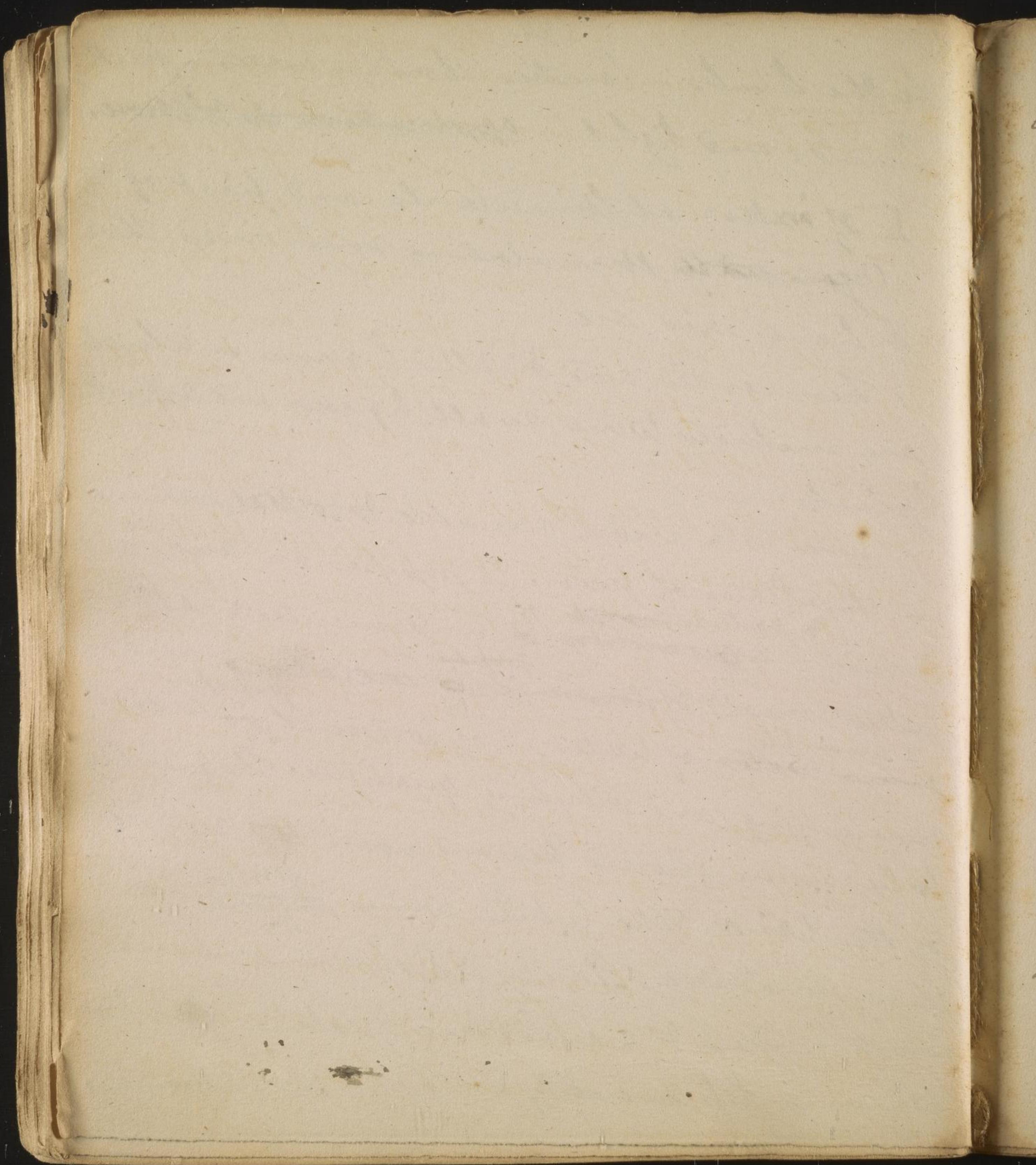


to the limbs - Caustics - boiling water - friction,
sound, and light. ~~applications to the nose~~

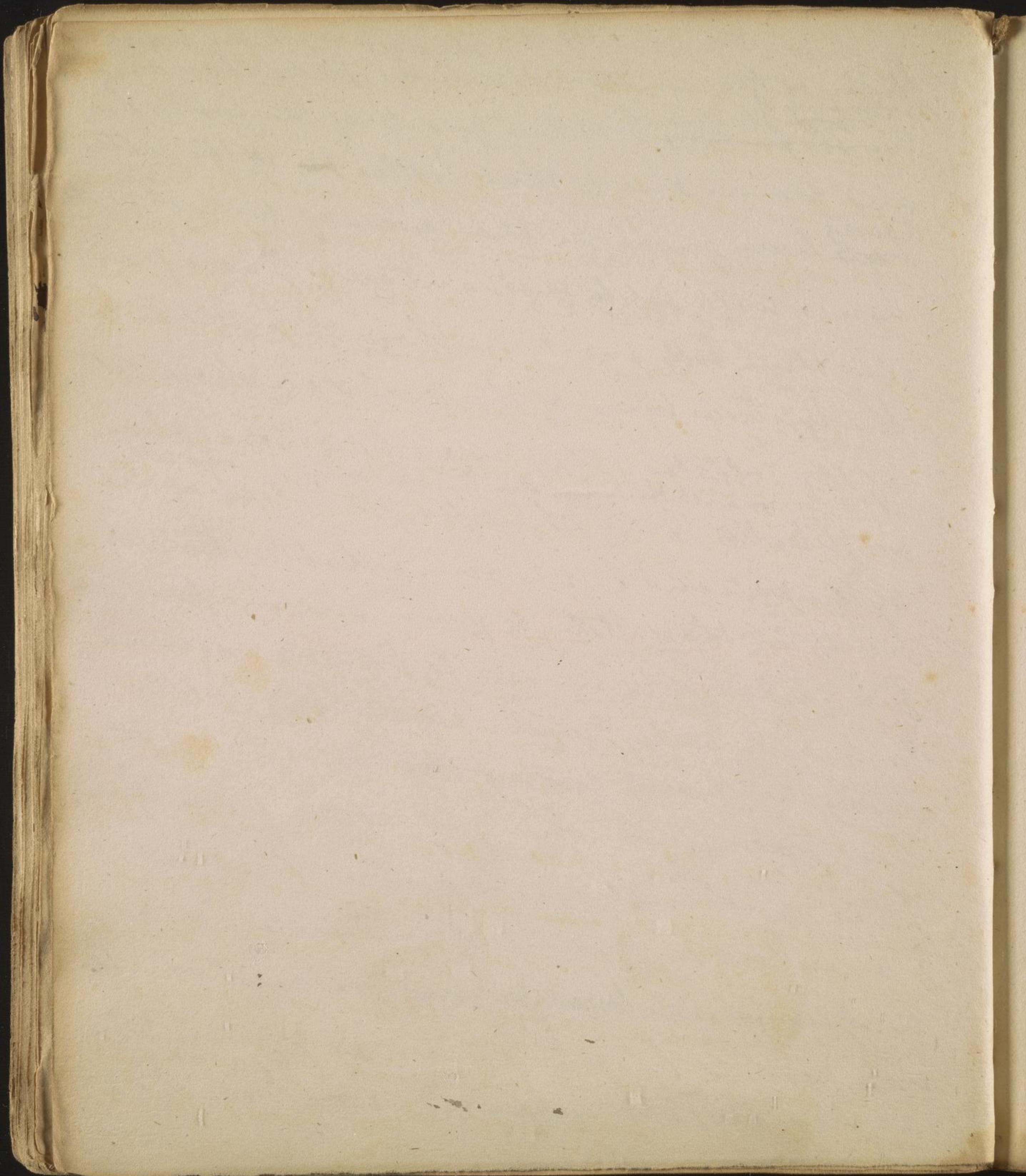
I of internal Stimulants. and first of
~~Opposite~~ Stimulating medicines. These
I have said are

1. Fermented and distilled liquors in which
are included wine, malt liquors and Ardent
Spirits.

Wine is a most agreeable ~~Scotish~~ medicine
in these states of fever. It requires an aid, a
portion ~~so much~~ of unfermented matter
Spirit - ~~approximately~~ ^{pipes} of unfermented matter
called Must; of course it is ~~containing~~ and
a quantity ^{pipes} of water, - of course it is cordial,
soothing, & diluting qualities. The quantity
to be given should depend upon the nature
of the Wine. The white wines ^{such} as
Sherry, Madura, Sicily & Lisbon contain
most cordial & nutritious qualities, for which
season a less quantity of them should be taken



The words of medicine bear
 than of the red wines such as port & claret. ~~for~~
~~testimony of a quart~~ ^{to a quart} to two quarts of the former
~~the former~~ ^{or} ~~the former~~ to one to three bottles ~~or~~ of the latter
 having been given in the course of four & twenty
 hours with safety & advantage. I have prescri-
 bed them both rarely in those quantities in
 the typhus fever of the military hospitals
 of the U.S. They may be given alone,
 or with the ~~wine~~ ^{or water} in the form of wine whey,
 or diluted with ~~water~~ ^{water}, at the pleasure
 of the patient. It is remarkable that pa-
 tients in these states of fever whom four or
 five glasses of wine would have intoxicated
 in health, will drink two or three bottles in
 a day without ~~feeling~~ ^{the} discovring the
 least ~~sign~~ sign of intoxication from them.
 It is of consequence to know this fact, for
 I once lost a student of medicine in a
 typhus fever because his parents would
 not permit him to drink as much wine
 as his disease required, ~~but~~ lost he



Should pass into Detoxicity in a state of in-toxication

2 of the malt liquors Porter should be preferred. Its bitterness disposes the Stomach to retain it, and as it is kept longer before it is sold than any other malt liquor, it is not so liable to be decomposed in the Stomach. From one to three bottles of it may be taken in a day according to the state of the System.

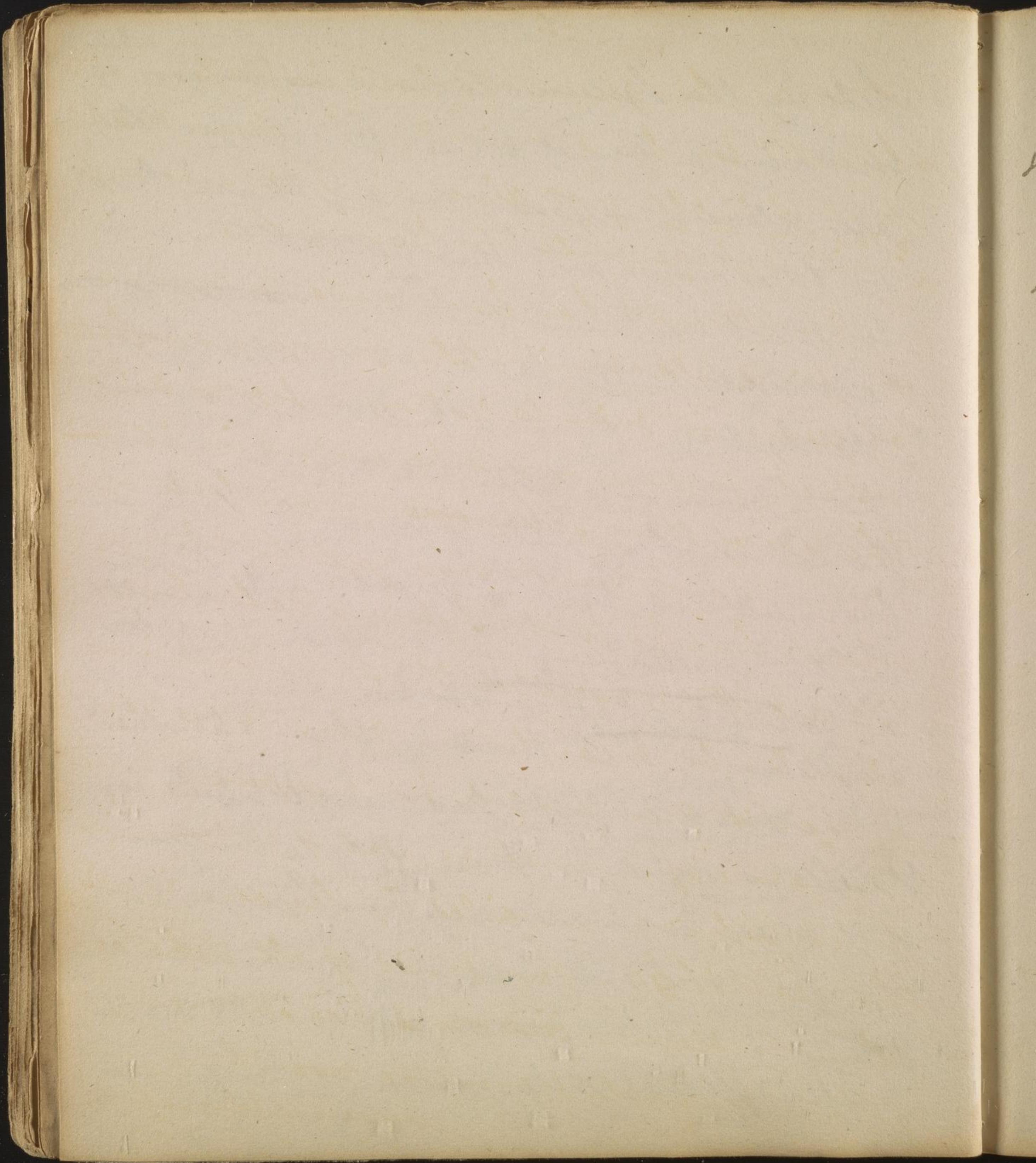
3 Distilled spirits ^{should} ~~may~~ be given to persons who have been in the habit of using them when in health, for their systems will not feel the more full stimulants of wine and Porter. There are cases in which they are necessary to the persons who have been habitually temperate. They are most useful, where a wudden effect is required. They are indicated likewise after wine and porter have lost their cease to be

A person took Spirit & wine of each a
Quart in one night with an equally
favourable issue to the disease. So much
was the sense of taste affected in this
person that the Spirit was as insipid
upon the tongue as Water. In cases
where deglutition was impracticable,
the Spirit and wine were poured by
^{down the throat} compulsion into the stomach. It was
remarked that Brandy quenched thirst
more than any other drink. It
acted by its stimulus - diffusing invigorid ex-
citement from the jaws, to every part
of the body.

thus

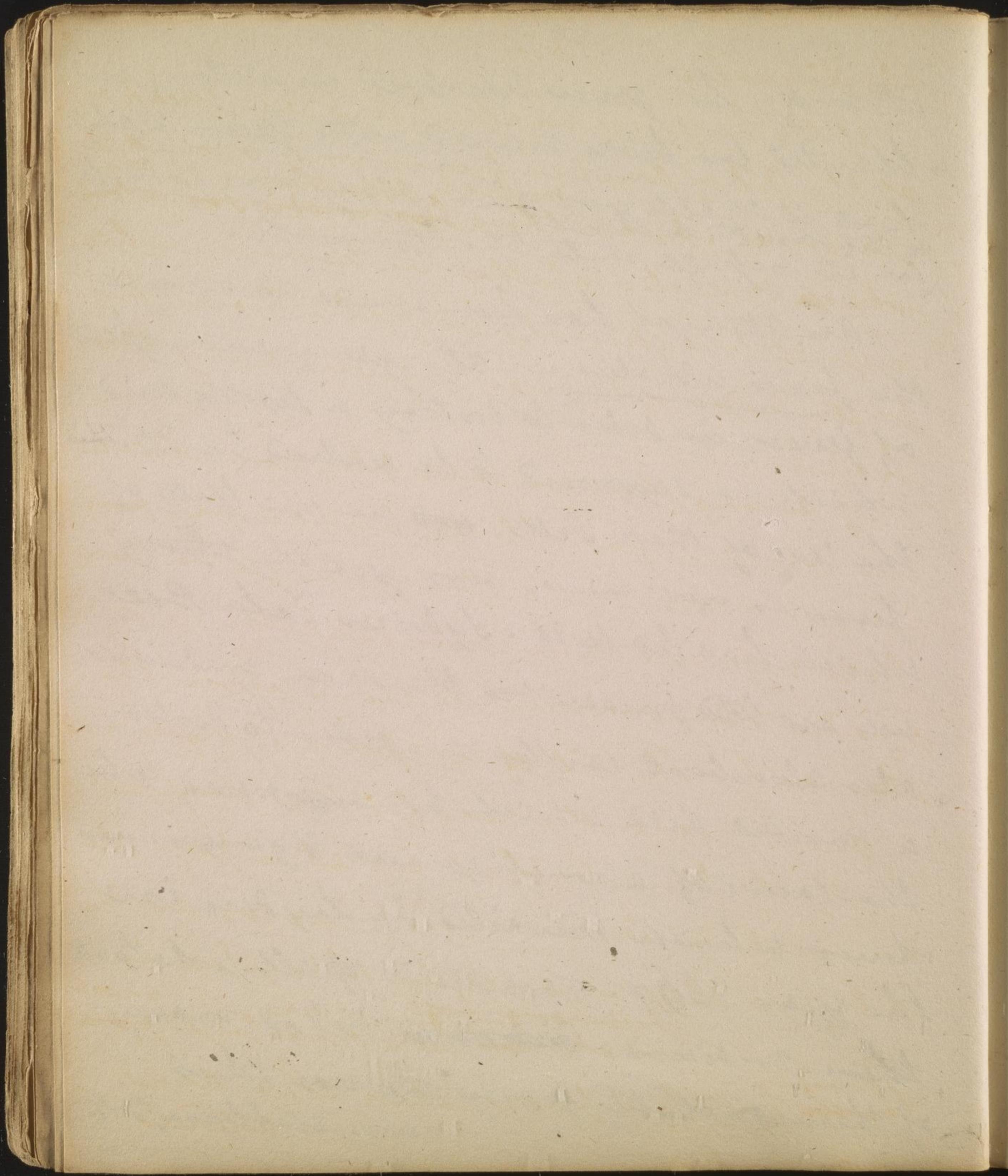
felt by the system. There is no danger of producing a love of ardent spirits, for they are seldom necessary longer than two or three days, and this ~~is too~~^{the} time is too short for them to become ~~accustomed~~^{accustomed} to the taste, or necessary to agreeable to the system. From a quart to two quarts have often been taken in twenty four hours in these states of fever. A lady in Connecticut took a quart in 8 hours with in the spotted fever in the year 1809, ~~to~~^{with} a ~~great~~^{a great} quantity of ~~violent~~^{violent} opium. Other cordial medicines & was cured by them. Another

4. The volatile Alholi has great virtues in these states of fever. From five to ten grains of it may be given every two hours. It may be conveyed into the stomach in the form of a balsus, or of pills mixed with a little flour, or tassives of Roses, or



it may be given dissolved in water, and
obliterated by being mixed with gunpowder
that it shall not give any uneasiness
to the mouth or throat, nor impede
the passage into the stomach.

An attempt has been made to relieve
the fixed alkalis in the gaseous state
of fever, in order to destroy a leptic acid
which is supposed to be evolved in it. This
use of these salts, in this state of
fever is not new, nor yet the theory
which has led to it. Sylvius De la Boe
we are told prescribed the same medicines
also absorbent carthars in order to destroy
a morbid acid which he supposed to be
the cause of a violent gaseous & gassy
fever which prevailed in Leyden in
the year 1669. Two thirds of all who took
these medicines died, and died, & many
of them probably from the ~~use~~ their
unsuitableness to



the disease.

of the Inspiratory Oils I can speak only of the Oil of Amber from my own experience. In all those ~~Syphilitic~~^{partial Affections of the} ~~Sympathetic~~^{whista} muscles whether in tremors, or fits - &c., it is extremely useful. From five to ten drops of it may be given every two hours. —

Of among the Aromatic Oils, those which are obtained from Cloves, Cinnamon, and Aniseed & Mint are often employed in those States of fever. Their principal use is to make other medicines lie easily upon the stomach. The Oil of one species of Peppermint is most frequently used for this purpose. Of the Stimuli that are taken from the animal kingdom Unak & Castor are the only two that now retain their place in medicine. ~~Unak~~^{The fresh has} ^{most} generally been employed with success in those fevers when they are attended

expedite

✓ Thus object to its being offensive to the
sense of smell & taste, to its being expensive
and often adulterated. I do not deny its being
occasionally given with Scurf, But I have
observed it is rather ~~the~~ ^{another} store of discans for
discans, or Symptoms of discans in which
all the common stimulants of the shops
have been previously given without Scurf.
In this case it acts ^{by} its novelty and ^{2nd} by the febleness of its
stimulus, being exactly proportioned to the
tender remains of excitability of the system.
Its efficacy therefore depends ~~not~~ upon its strength,
but its weakness as a stimulus. It is this way ♦
✓ Upon the glands in increasing & lessening
the secretions — upon the

♦ that feble remedies prescribed by Grachs to
old women often perform cures of discans which
have long resisted the most powerful stimu-
lating remedies.

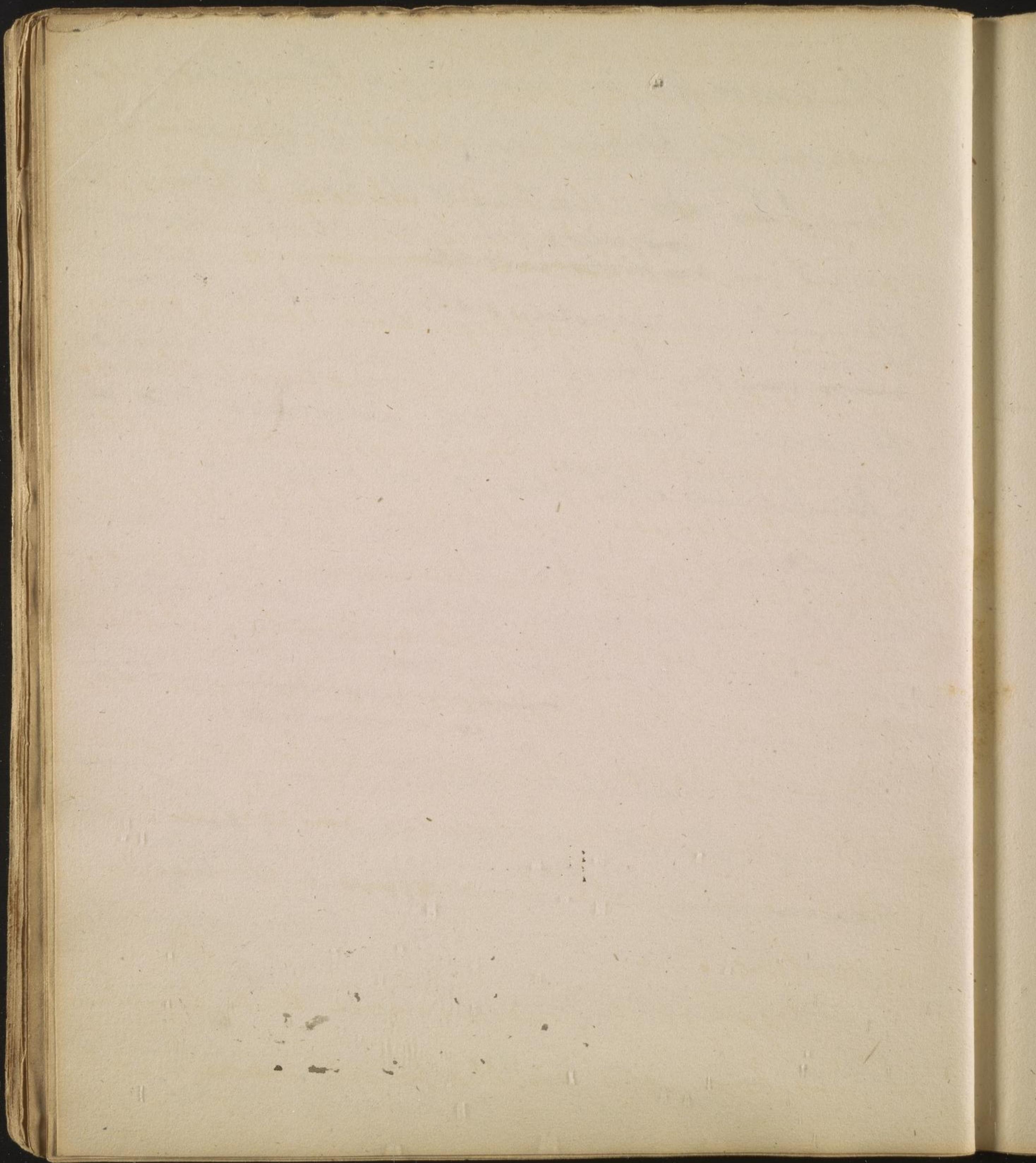
28

with symptoms of disease in the muscular system, but as ~~they are expensive & tasteless~~ ^{is an} medicine, offensive to its taste & smell & ^{very expensive} taste to most patients, & very apt to be adulterated, and as its effects are where sure and taken in the largest doses are by no means generally useful, I think it may be laid aside, and the Oil of Amber or on the Liniment or watery solution of Apsafotida be substituted for it. While I Opium as a stimulant is what the Roman poet calls his hero, "ipse Agmen" or host of itself. I have in clapping Opium among the stimulating medicines I am aware of ^{that} different from Dr Cullen and some other physicians who have considered it as a sedative, but its effects upon the pulse increasing upon the lymphatics in encreasing & lessening its fulness lessening its frequency - ^{& ~~more than~~} ~~less~~ this action - in relieving pain - [&] ~~more than~~ ~~less~~ our nerves & in giving them tone - upon

v which act upon but one, or seldom upon
more than two or three of them.

the muscles in removing their tremors,
upon the brain in preventing, or indu-
cing sleep ~~with~~ according to its dose - upon the
~~inspiratory~~ exhilarating it - upon the
mind in ~~sustaining it~~ - ^{which}
Stomach in removing the flatulency, & ~~from~~
& upon ~~the~~ the bowels in checking the diarrhoea
~~and~~ ^{and upon the} that arise from debility, all prove it to be
Skin producing ~~as~~ sweat, or exciting a gene-
ral itching, all prove it to be a stimulant.

In thus acting upon all the different systems
of the body it differs from ~~most~~ all other stimulants,
for example - Bark acts ~~principally~~ ^{*} chiefly
upon the blood vessels, - mercury upon the lympha-
tis and glands, - volatile alkali and ~~fermented~~ ^{Other}
oil of amber upon the muscles
~~bark~~ upon the nerves, - fermented liquors
upon the brain and mind, - bitters upon the
stomach, and astringents upon the bowels,
Whereas Opium possesses a universal empire
over all the systems of the body. It differs



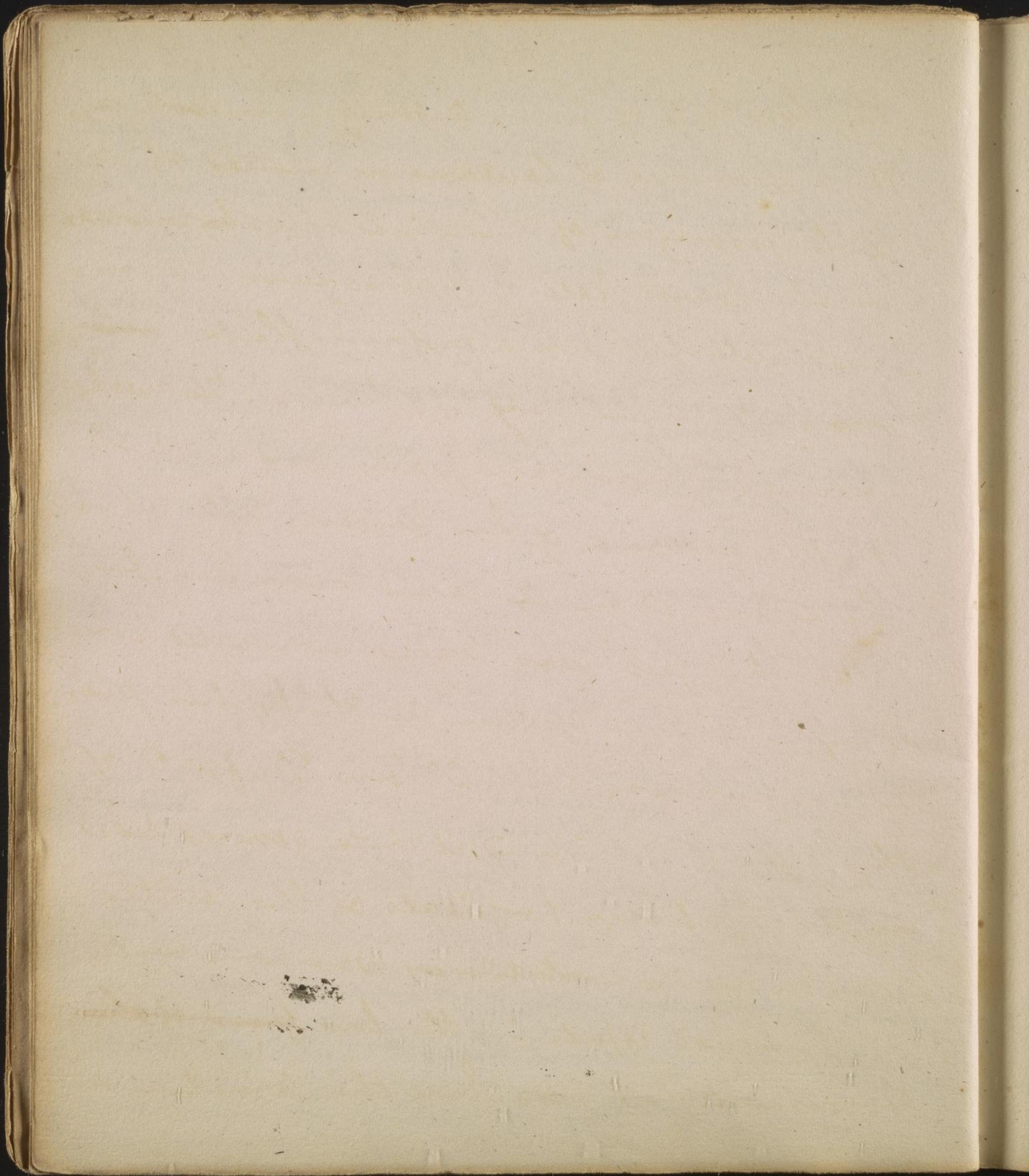
in its extensive effects³⁰
moreover from several of the narcotic plants
with which it has been clasped such as hemlock
henbane & night shade which & hoppes all
chiefly upon the nerves
of which act ~~but in夢tions~~ and
brain in inducing sleep, and easing pain,
and seldom produce any material changes
in their ordinary doses upon any of the
other systems. In short - while all the
stimulants that have been mentioned may
be compared to a candle or torch, which
acts in a narrow sphere & only upon the
sense of sight, Opium may be compared
to the sun which diffuses ^{its} ~~and extends its~~ in-
fluence over all ^{The} kingdoms & elements
of nature.

Against its preminence as a stimulant,
it has been said, distilled spirits have act

V of Gunpowder which would propel an 18
pound ball thro' a ~~bold~~ nineinch wall, and
if its force were divided, and spent upon
18 grape shot would scarcely ~~possibly~~ make
but a fuble impression upon it.

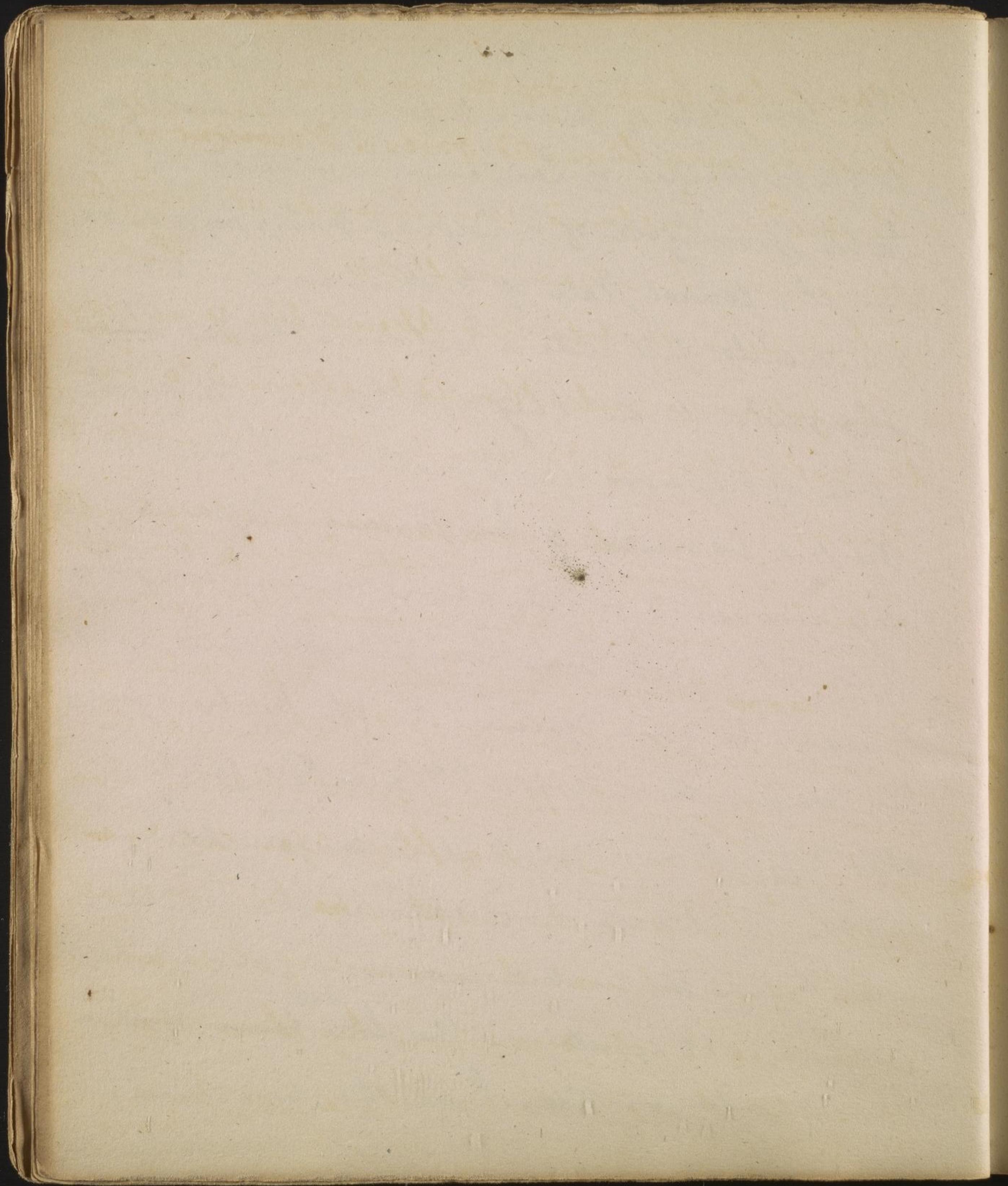
more powerfully upon the Arterial system,
and that this is evident from greater frequency
of pulsations being more promptly induced in
the pulse by a dose of distilled spirits, than by
an equal dose of Opium. This may be true,
but it ^{no} ^{the former} more proves ~~than~~ Spirits to exceed the
latter in ^{their} stimulating powers, than the
greater ^{efficacy} of Bark in curing an Intermittent.
Thus opium proves it to be ~~a~~ a more
powerful stimulant than Opium. Both
the Spirits and the Bark concentrate nearly
their whole stimulus upon the blood vessels,
while Opium ^{divides and} ^{among} Diffuses its stimulus ~~extremely~~
all the Systems ^{parts} of the body. — Thus the same quantity
of

An accident which happened in the
~~History of Delaware~~ State of Maryland, and of which
I first heard about the year 1770 first suggested
to me the idea of giving Opium in



by mistake

the low state of fever. A gentleman took, a
table spoonful of Laudanum instead of a
table spoonful of a Cordial Dr. L's by mistake,
in the lowest state of typhus fever. He im-
mediately fell into a profound sleep, ⁱⁿ and
~~sleep~~ which he lay 48 hours. He awoke
free of terrors - and pain and with the
perfect exercise of his senses. After which
he recovered in the rapid manner. Soon
After this fact was communicated to me
I began to give Opium in the typhus fever.
In conjunction with Dr Sam Duffield of
this city, I introduced it into general use
in the military hospitals of the United
States during the revolutionary war, and with
the happiest effects in the low ~~fever~~ of the
hospital fever. ~~This~~ Since the American



Was it has been adopted in great Britain,
but in very limited doses. Dr ^{Campbell} ~~Henderson~~ of
Kendal in England commends it in high
terms in his pamphlet ^{upon} thirty:
days few published about the year 1787.

The following rules should be attended to in
the exhibition of Opium in the low States of
fever.

I begin by giving it in small doses & tend to its
expediteability, where you suspect great accumulation.
Opium will often compose the system,
and ~~will~~ induce sleep when a greater
quantity will prevent it by elevating the
system beyond the sleeping point. Patients who
complain of the want of sleep after taking a
quantity of Opium ^{the first time}, often tell us they ~~have~~ took ~~too~~ small
a dose of it, whereas their want of sleep ~~is~~
more frequently occasioned by their taking
it in too large a dose. There are two
ways

V cases in which from faintings, or any
other cause sudden debility is induced upon
the system. The excitability is thus accumu-
lated, and small doses of Laudanum produce
great effects. Dftedman relates a case in the
medical espays of Edin^r in which a common
dose of Laudanum induced death in a
man who had been suddenly debilitated
by taking an emetic.

of inducing sleep by means of Opium. 1 By giving exactly as much of it as will raise the system to the sleeping point. 2 By giving it in so large a quantity as to depress the system to the sleeping point by its excess of stimulus. The latter is always unsafe, ^{Determinates} ~~as it disposes~~ the blood too powerful to the brain where it sometimes creates disposes to effusion and death. By attending to this giving Laudanum in the former way, I have often induced easy sleep by giving from five to ten drops of it, when I am sure from 50 to 200 would not have induced it, or if they had, it would have been at the expense of the evils I have mentioned. This rule applies with equal force to those
 2 The dose of Opium should be increased with the progress of debility. ~~Forsome~~ I have often prescribed from two to ten grains ^{of it in the course of} a day in the

18

✓ Lewis when it induces sleep, and this
sleep does most good when it continues
6 or 8 hours, so as completely to lock
up excitability, and thus prevent its
waste in useless sensations & emotions. Take
~~the only in giving it to induce protracted~~
~~& deep sleep that there be no previous~~
~~tendency to suggestion or suggestion in~~
~~the brain~~ ~~as on~~ I have said sleep is a disease,
that is, a healthy apoplexy. I have taken notice of
the salutary effects of the disease of thirst in concur-
-trating morbid excitement in the fauces, & thus
defending more vital parts of the body from it in
the same manner that a diarrhoeal enema
produces its salutary effects. Now why may =

the typhus fever, and from two to six grains
of it at bedtime. In the Scarlet fever, ^{in Connecticut in} a grain
and an half of it were given ~~in~~ every
hour for eight hours with great advantage.
There is no limiting the dose of this medicine,
when given at first in moderate quantities.
Dr Bouquet of Paris took an hundred grains
of it in a day for a colic with safety, and
relief to his complaint. ~~If it could~~ When it is
without success, I believe it is because it is
taken in too small doses. It does most

3 It should be given during the day in small
doses, as well as in large doses at night. In
cases of extreme weakness, the pulse should
be watched during sleep, & if it flag, the
patient should be waked, and a fresh dose
of Camphor should be given. In case
the want of neglect of this practice,
many patients die in their sleep in the

= sleep be made to perform the same salutary purpose by abstracting ^{useless} morbid actions from every part of the body and concentrating them in the brain? In this way as I shall say hereafter, nature often brings on the crisis of a low typhus fever, and in this way, we observe the generally carries off the disease of drunkenness - nay. The sleep in both those

It should be given in some cases is from 12 to 24, or 30 hours. Recollect what was said in our Therapeutics that we are too tender of the brain in translating disease from one part of the body to another. Its retaining its ~~original~~ ^{original} healthy organization ~~processions~~ ^{processions} of head aches &c &c repeated under ~~the expected alteration~~ ^{the expected alteration} of epilepsy for for 20, or 30 years, - ~~under great~~ ^{under great} bandages protracted ~~for~~ and of drunkenness during a long life, show that that ~~weak~~ ^{weak} the brain is a much harder viscus than has generally been supposed. Take care only in giving Opium to induce deep or protracted sleep, that there be no previous tendency to congestion or effusion of water in the brain. It will =

typhus fever.

It ~~Opium~~ should be laid aside
4 ~~The preparations of Opium~~ for a day or
two when the system becomes insensible to
its action, and other stimulants used in its
stead.

5 When the Opium ceases to act through the
medium of the stomach in common doses,
or when it produces pain in the head, or
twitches at Mornach give it by way of
Glyster. Remember the fact of ruff-
ing, its effect upon one nostril, and
exciting sneezing ^{and pleasure} when applied to the other.
A Double ^{Dose} ~~the quantity~~ of Laudanum will
be necessary to act upon the system when
it injected into the bowels. ~~to it~~

^{6th} ~~Finally,~~ In proportion as the patient recovers,
and the excitability of the system is restored, the
dose of Laudanum should be lessened in the same
ratio that it was increased with the decay, or
want of excitability.

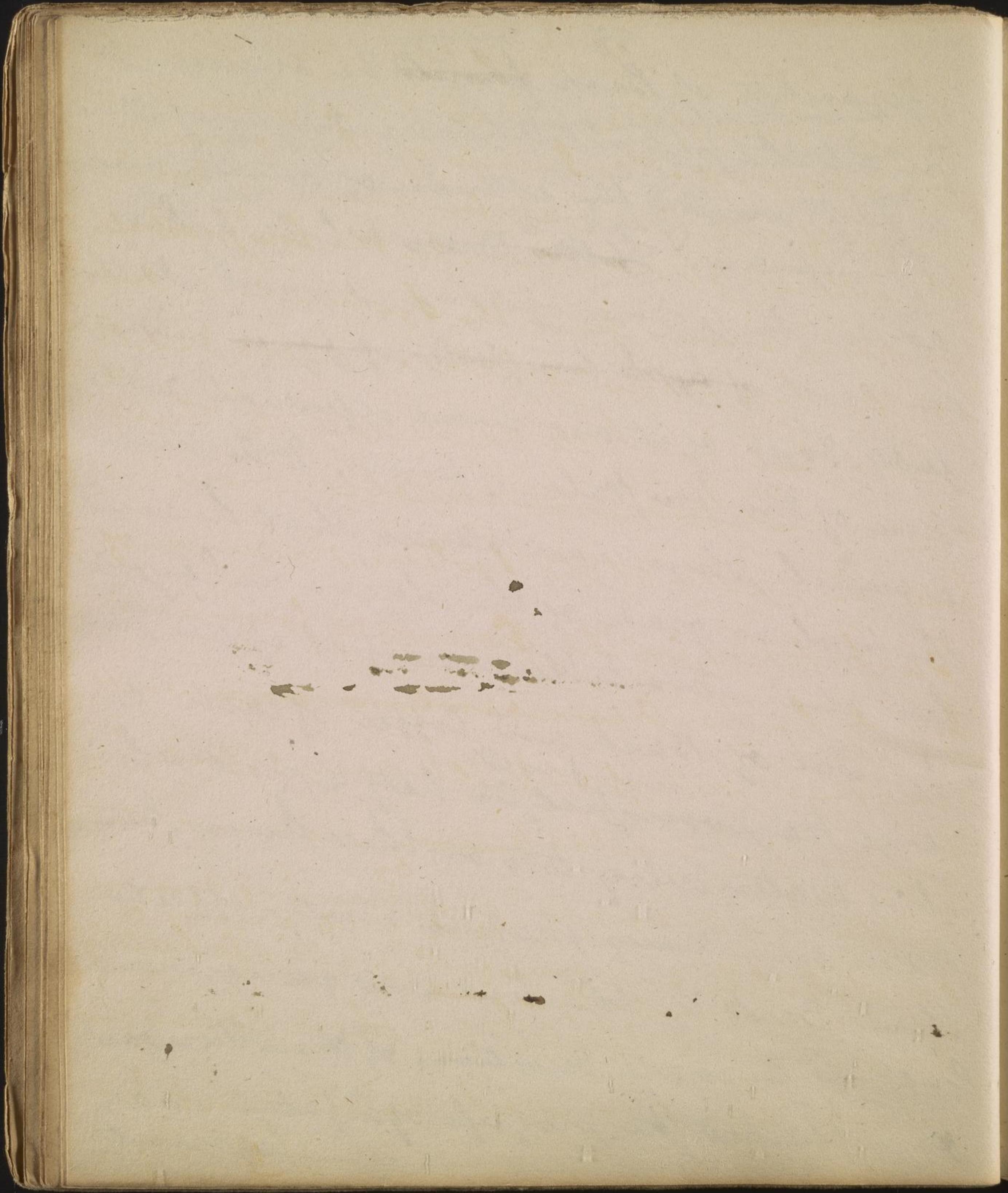
generally be safe where there has been
little or no previous delirium, or headache,
and where the blood vessels have been
~~more and~~ ~~more~~ ~~more~~ ~~more~~ sufficiently emptied of their
blood by previous bleeding, or the abstraction
of aliment by a long duration of the
fever. return to p. 35.

Other may be used after Opium loses its effect. It is a ~~great~~ prompt & powerful stimulant, but so volatile that its action soon passes out of the system. From 30 to 60 drops of it may be taken every hour in any of the common winds of a patient.

Bark has many advantages in these states of fever. It is both a diffusible & durable stimulant. Begin with the infusion unless you have been called late in the disease, and afterwards give the Bark, ^{an ounce} ~~mixed with Thyme,~~ in ~~the same~~ ^{an ounce} & an half, ~~and~~ and an ^{fifty} drops - mint water an ounce & common water six ounces, mixed together in the form of a Julep. The dose should be a table spoonful of it every hour and increased, and lipped with the increase or decay of excitability. The

v The Spanish physicians have lately
told us that in the malignant state of
the yellow fever at Cadiz so far as
Quantity of Bals was taken daily,
& that a less quantity was of no
service.

Quantity of Bark ~~should~~ be increased
until the patient takes six ounces of it in
a day, provided the increase of debility makes
it necessary. ~~After~~ Bark while I thus
advise large doses of Bark, I must add, there
are cases of ~~high~~ low states of fever in which
full doses of it are more effectual in the
cure of the low states of fever. Dr. Asellini
a French physician tells us that he cured
the boghous grade of the plague in Egypt
by giving two tables poonsful of an in-
fusion of Bark and Coffee of each a
large teaspoonful ^{infused} in half a pint of boi-
ling water every two or three hours. Boil-
ing water every two or three hours. Even
Bitters sometimes produce greater effects
than Bark in the low and gangrenous
states of fever. A decoction of the willow-bark
once checked the progress of a fatal in-
flammation



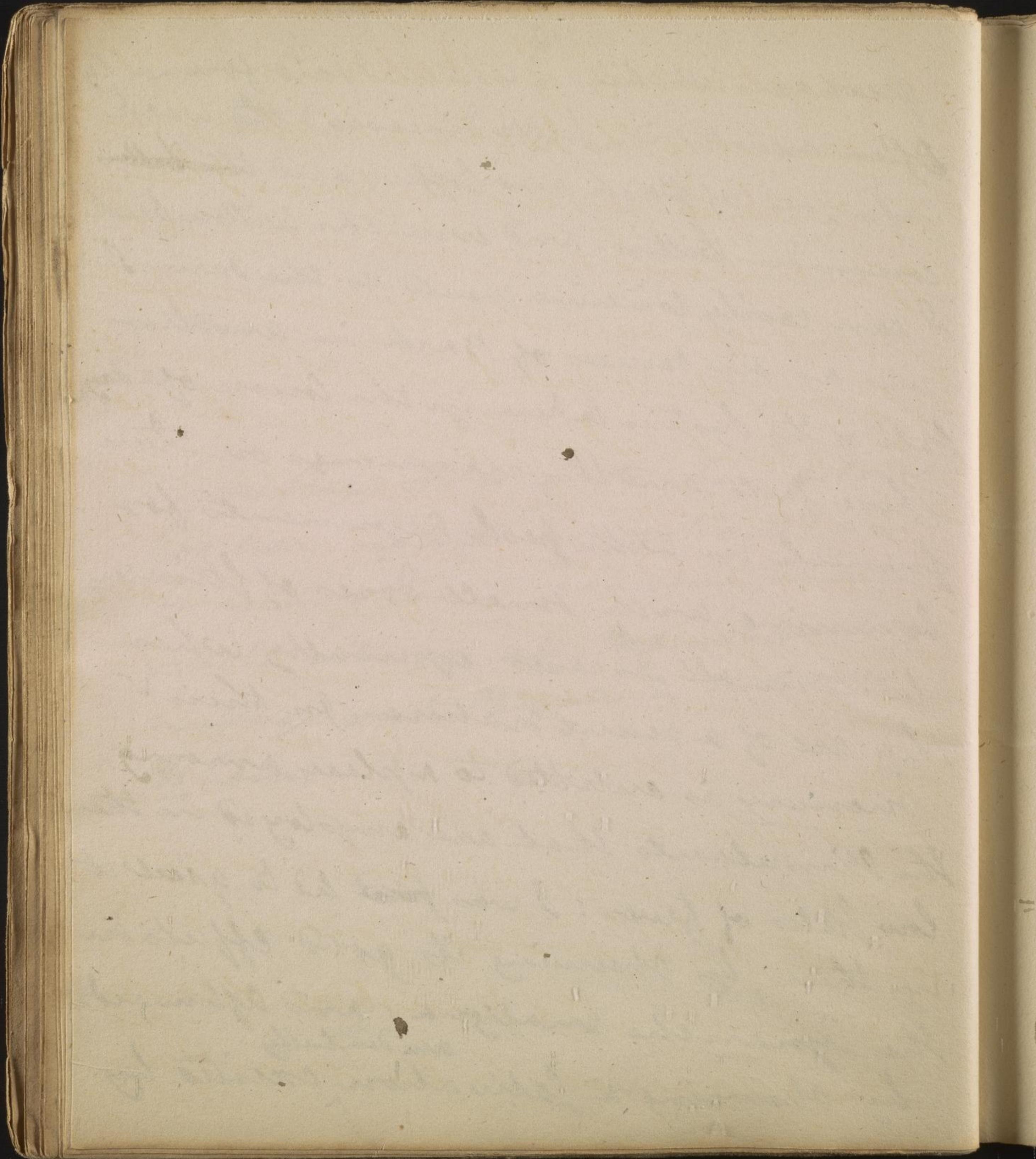
6
to
2
A
L
C
ca
bo
o
h
C
cri
L

39

fever at the Illinois country after the
largest doses of Bark had been given in it
to no purpose. The success of these opposite
modes of practice may be ascertained for in
the following manner. In the low ^{or} prostrate,
or gangrenous fever the system is in one
of the three following states. 1 a good deal
excited, ^{with} but little excitability, 2 feebly
excited, ^{and feebly} and ~~feebly~~ ^{with} excited. now in
both these states of the system six drams of
Bark taken in the course of four and
twenty hours, ~~I consider it~~ would
produce powerful & salutary effects by
overcoming morbid ~~action~~ excitement
wherever it existed, and rousing dormant
^{with the pulse remaining of} excitability and converting it into healthy
existing excitab^l. instantly ^{& gently} ^{by}
excitement. but 3: in those cases in
which there was weak excitement &

In latter stages it is so worn out that vital
has been expended by protracted anæsthetic
or exciting causes, powerful stimuli
will be not only safe, but indispensably
necessary. Weak stimuli in these cases
do harm.

great excitability, (which I said formerly often existed in febrile diseases) the weak infusion of Bark and Coffee, and ~~that~~ common Bitters, and even the Willow bark I can easily conceive would do the same service as six drams of Bark in another state of the system taken in the course of a day. These facts and the reasonings on them, furnish us with fresh arguments for beginning with small doses of stimulants in all diseases, especially when they are of a recent nature; In their weak mercury is entitled to a place among the stimulants that are employed in the low states of fever. I was first led to give it in them, by observing its good effects in the Cynanche maliformis, and afterwards accidentally by observing a salivation excited by



41

the application of a little mercurial
ointment to the side in a typhus fever,
instantly to remove the fever. I have
often employed, since and with great
advantage. Even where it does not affect
the mouth, it does service as a general
stimulant. When I first gave this no-
table medicine in fevers such as I am de-
scribing, I did not know that it had
been in general use in other countries.
In the same year and nearly at the
same time of the year it was given
by Dr Wade in the West Indies, Dr His-
tholm in the West Indies and myself in
this city ~~by a~~ without any concert, and
without even the knowledge of each
other's names. In the course of my

v Sir Robert Wilson speaks in high terms
of the efficacy of this remedy in the
plague which affected the British
soldiers in Egypt.

62

reading I have since discovered that it
was used as a purgative in fevers in
Italy in the year 1739, and in other
parts of Europe afterwards for the same
purpose. It was because it was given
empirically, that it fell into disuse,
for when given before the system is reduced,
it is either useless or hurtful. In
the yellow fever of 1798 which in some
instances forbade bleeding, a Salivation was
always useful, and it is remarkable it
was most easily excited in such cases.
I have never heard of ~~that~~ an instance
of its producing mortification in the jaws
mouth or throat when it has been given
in a reduced ^{that is a} prostrate or typhus
state of the system. The smell of mercur-
ial Ointment is sometimes offensive

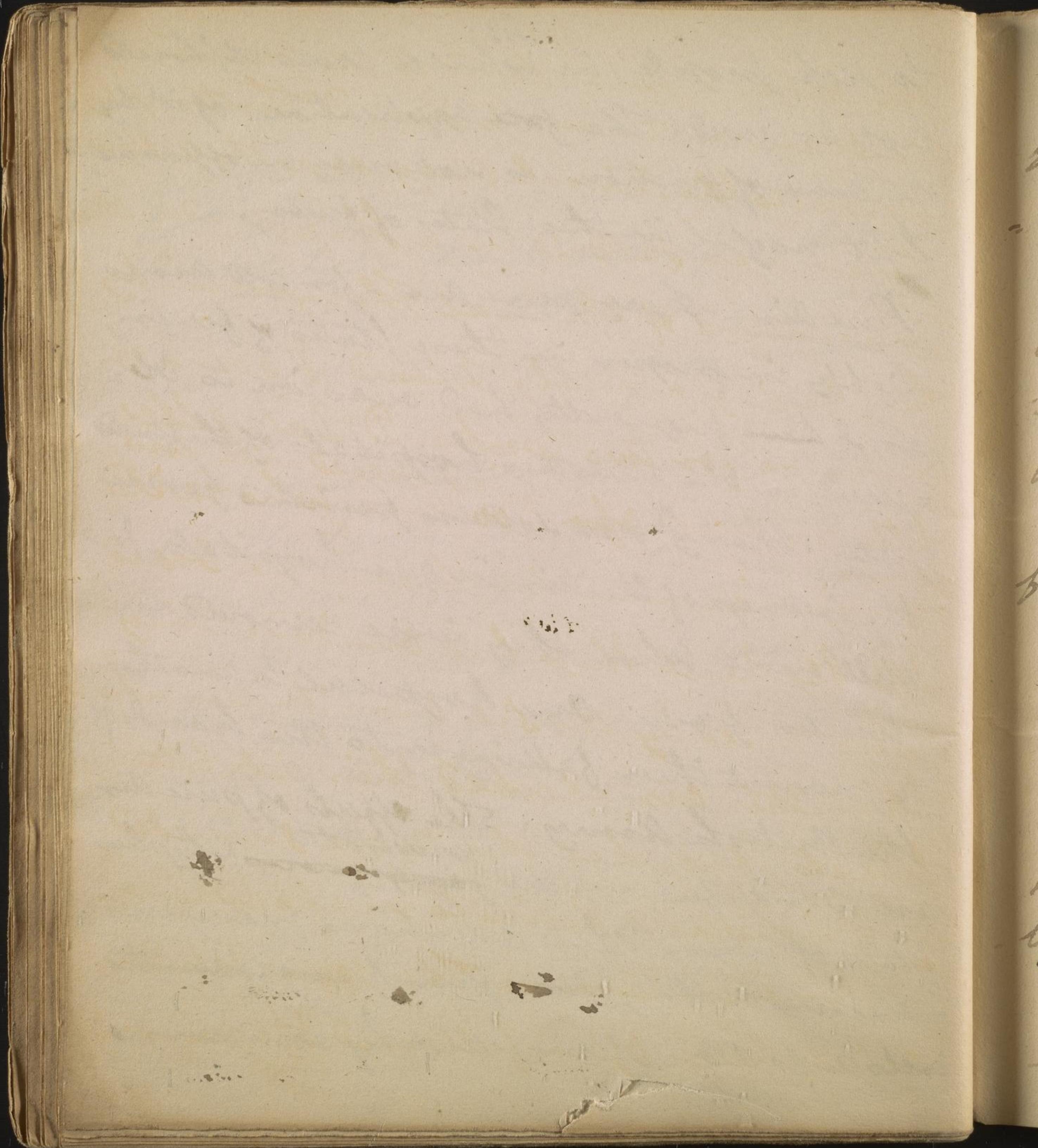
~~stimulating~~
The Remedies which are proper to act upon
the whole system thro' the medium of the nose
are Ardent Spirits - Other - Ammonia, in-
haled, or thrust up the nose by means of
a feather.

The remedies which act most powerfully
upon the System through the medium of
the bowels are Bark - Laudanum - Wine
and Spirits - turpentine & large quan-
tities of water so large as to act by the
stimulus of distension.

43

to sick people, in which cases it should
not be used. The ~~for~~ application of it by
means of friction, is not only inoffensive,
but useful in these states of fever.

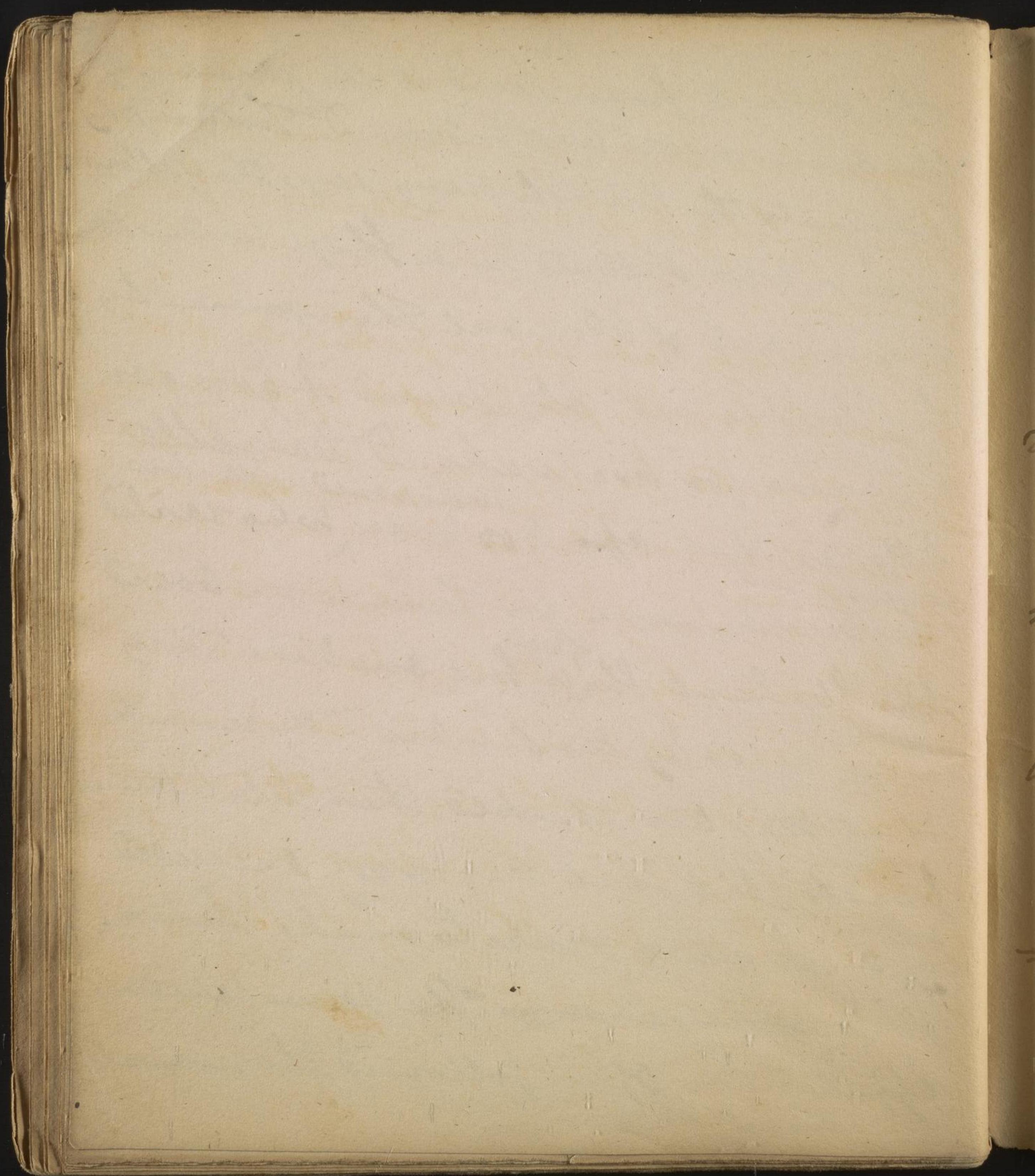
* Pure air - I say pure air - for cold air is
highly improper in these states of fever,
as I have frequently had occasion to ob-
serve in the military hospitals of the United
States. Many ^{of} our soldiers perished from
the coldness of the air in our hospitals, &
still more when they were removed in
winter from one hospital to another
to prevent their falling into the hands of
the British Army. The effects of pure air
are wonderful in the ~~prostrate~~ ^{yellow} ~~typhus~~
states of fever. Lind mentions many in-
stances of the yellow fever being converted
into a mild intermittent by removing



44

the patients from land to the pure air of
the ocean in the West Indies. Dr Trotter-phy-
cician to the British Navy says, the yellow
fever was subdued in a ship under the
command of Admiral Thompson by
her leaving a sickly Island & going on
a cruise for two weeks. Dr Dalselle
tells us that of 400 men who sailed
from Cayenne for France on board
the Elephant ship, ^{of War} but one died. They
were cured by the sea air. He remarks
that this air checked their debilitating
fevers, but that they were succeeded
by a constant desire to make water.

In so far as the same salutary
effects have often followed the removal



45

of patients ill with low fevers from the
Cross City to a Country, and from a
low to high & mountainous situ-
-ations.

In every case where patients are
removed for the ~~for~~ benefit of pure air,
they should be conveyed in a boat
or in an ~~an~~ easy chair or
when practicable or in a very easy
Sedan Chair. Long & violent motion of
Carriage. Long & violent motion of
said formerly is always followed with
an increase of fever, and sometimes
with sudden death, as we ~~are~~ now &
then witnessed in the yellow fever hos-
pital upon the shore of the Schuylkill
in the year 1798.

